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Ontario. Legislature (Assembly)

SESSIONAL PAPERS

VOL. LXIX—PART V

THIRD SESSION

OF THE

NINETEENTH LEGISLATURE

OF THE

PROVINCE OF ONTARIO

SESSION 1937

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TORONTO
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1938

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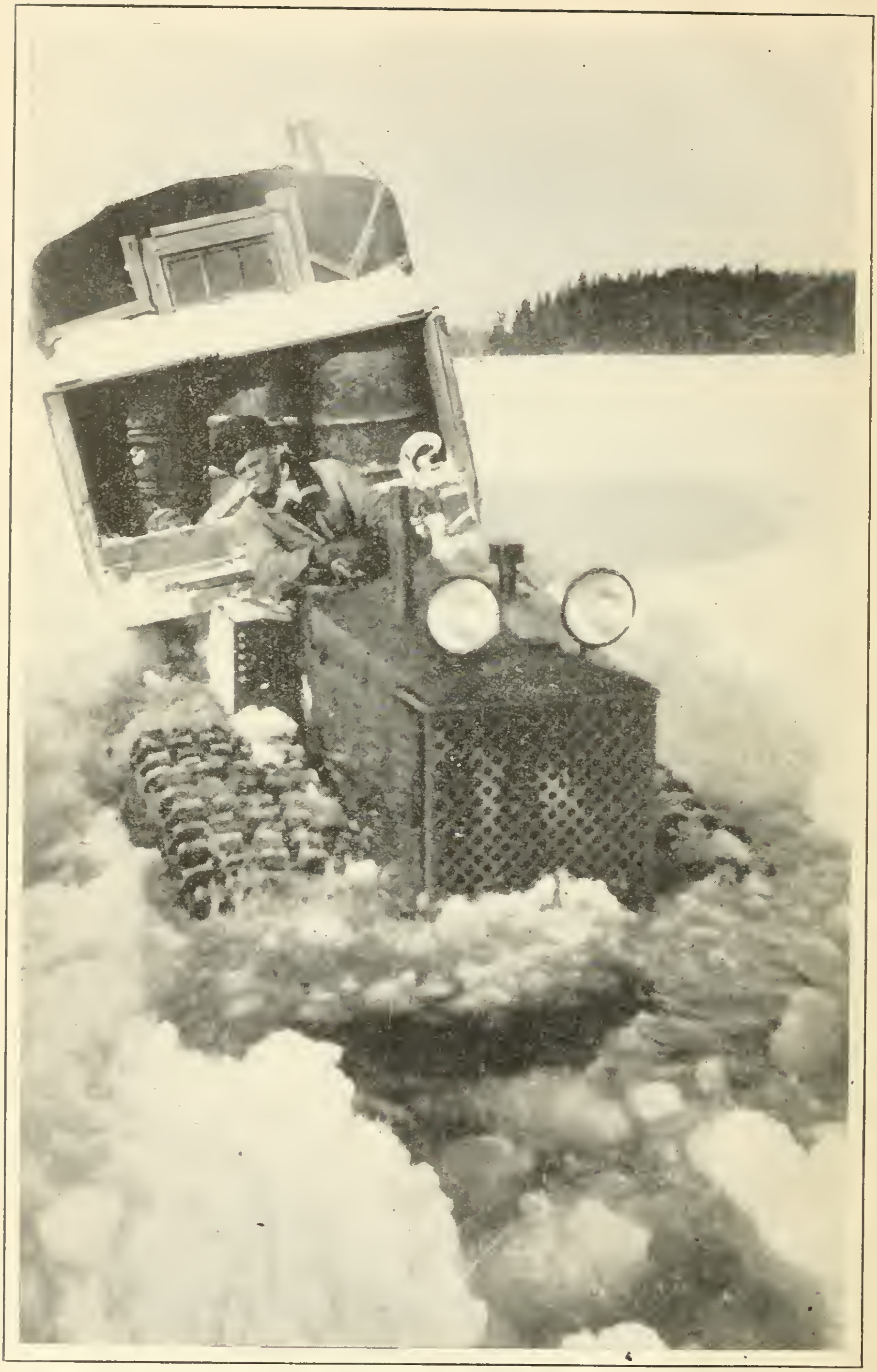

TRANSPORT DIFFICULTIES—NORTHERN ONTARIO

Tractor ploughing through slush on Lac Seul, February 1936

TWENTY-NINTH ANNUAL REPORT

OF

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO

FOR THE YEAR ENDED OCTOBER 31st

1936

ONTARIO

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

TORONTO
Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty
1937

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO
1936

T. Stewart Lyon	*Chairman*
Hon. Arthur W. Roebuck, K.C., M.L.A.	*Commissioner*
Hon. Thomas B. McQuesten, K.C., M.L.A.	*Commissioner*
A. Murray McCrimmon	*Secretary and Controller*

Chief Engineers

T. H. Hogg, B.A.Sc., C.E., D.Eng.	*Hydraulic and Operation*
R. T. Jeffery, B.Sc.	*Municipal Relations and Rural Power*

To His Honour

THE HONOURABLE HERBERT A. BRUCE, R.A.M.C., M.D., F.R.C.S.,

Lieutenant-Governor of Ontario

MAY IT PLEASE YOUR HONOUR:

The undersigned respectfully presents the Twenty-Ninth Annual Report of The Hydro-Electric Power Commission of Ontario for the fiscal year which ended October 31, 1936, together with financial statements and statistical data for the calendar year 1936 relating to the municipal electric utilities operating in conjunction with the various systems of the Commission for the supply of electrical service to the citizens of the Province.

The report contains a record of the Commission's activities in administration, construction and operation, and financial statements for the year ending October 31, 1936.

In addition to the business of supplying power to the municipal electric utilities and certain large customers directly in all systems, the Commission operates as trustee for the people of Ontario, under the Legislative Assembly and Executive Council, power developments scattered throughout the northwestern part of the Province. These operations are conducted by the Commission under an agreement which provides that deficits incurred in operation, or in capital charges, shall be made good from the Provincial Treasury, and surplus funds remaining after provision for interest, renewals, sinking fund and any other proper charge upon the capital employed, shall be transferred to the Treasury of the Province.

For the information of Your Honour and the Members of the Legislature, comparative statements have been compiled, showing for the several systems during the past seven years, the total cost of power supplied to the cooperating municipalities and to other consumers of each system, including the cost of power purchased under contract for each system, together with the revenues of each. There is also a record of such additions of capital as became necessary during the period under review.

Capital Expenditures

There has been a relatively small increase in the capital invested in the older systems during the past year. The extension of service lines for mining undertakings in the Little Long Lac district was the most important operation that called for the expenditure of capital in the Thunder Bay system during the year. There will be a marked increase in the mileage and cost of these service lines during the year beginning November 1, 1936. The Long Lac gold field will require, within a comparatively short time, not less than 7,000 horsepower with an ultimate increase, during the coming eighteen months, of some 13,000 horse-power. An additional unit to the Commission's Alexander plant on the Nipigon river is contemplated.

Northern Line Extensions

There has been a marked increase in the investment of capital throughout the year in the rapidly expanding Northern Ontario properties, operated by the Commission on behalf of the Province. Most of this money ($1,413,984) has been spent in the construction of high-tension transmission lines and service lines, connecting with mines that have reached the production stage and with mines that are still prospects. The principal source of power in the north has been the Abitibi Canyon development. Provision will be made during the year 1936-1937 for funding this expenditure, as well as for the further extension of mining loads. Provision will also be made for the construction of a storage dam on the Frederickhouse river, which will materially increase the supply of water to the Canyon plant at the period of minimum flow of the Abitibi river.

The capital invested in the plants of the various systems, embraced in the operations of the Commission on behalf of the co-operating municipalities, is $263,671,779. This is exclusive of Government grants toward the construction of rural power lines, totalling $10,232,098. The actual investment in the physical properties of the Commission, constructed to develop and transmit power to the four cost systems and in the Hamilton Street Railway is, therefore, slightly less than $274,000,000. The Northern Ontario Properties and certain radial railways, for the bonded indebtedness of which the Commission is still nominally liable, represent additional investments of $34,192,354. This brings the total capital investment in all systems up to $308,096,234.

Cost of Operation

During the year under review the cost of operation, maintenance and administration in the Niagara system has been $4,461,243, an increase of $82,982 over 1934-35. During the corresponding period the revenue from operation has totalled $24,365,449, an increase of $1,072,959. It will be seen that the increase in operating costs has been less than one-twelfth of the increase in revenue derived from operation. Equally satisfactory operating results have been secured in the various systems, other than the Eastern Ontario system, where during the exceptionally dry season a considerable quantity of power had to be supplied from sources outside of the system, because of the failure of the flow of the waters of the Trent river. Eastern Ontario costs are still fully $100,000 less than they averaged in the years 1929-1932.

Power Bills Cut

The increase in operating revenues has been obtained despite a marked reduction in the cost of power supplied by the Commission to the municipalities in the various systems, other than the Niagara system, during the year. The change in the interim rate in the Georgian Bay system was calculated to reduce comparative revenue to the extent of $40,100 during the year. In Eastern Ontario system the approximate effect of the interim rate reductions on comparative revenue meant a saving in wholesale rates to the municipalities of $133,200 during the year. In the Thunder Bay system reductions took the form largely of a cut in the cost of power supplied to paper mills. The basic rate for power for most mills at the Head of the Lakes was reduced during the year from $21.00 to $18.00 per horsepower per year. The Commission expects that the operations of the year 1936-1937 will warrant a further reduction at the close of that year.

Cancellation of Quebec Contracts

The most important change in the financial set-up of the Commission's operations, during the year, was that brought about by the cancellation of the Quebec power contracts. In the Annual Report for the year 1935, a statement will be found showing the contracts voided under the Power Commission Act of 1935. These contracts were made between the Commission and—

1. Gatineau Power Company, dated May 19, 1926, for a supply of 25-cycle power, increasing from year to year until a maximum of 260,000 horsepower was reached in October 1, 1931.
2. Beauharnois Light, Heat & Power Company, dated November 28, 1929, for a supply of 25-cycle power to be delivered in varying blocks from year to year until a maximum of 250,000 horsepower was reached on October 1, 1936.
3. Ottawa Valley Power Company, dated February 15, 1930, for a supply of 96,000 horsepower of 25-cycle power from the plant of the Company on the Quebec side of the Ottawa river at Chats Falls.
4. MacLaren Quebec Power Company, dated December 20, 1930, and supplemental agreement dated January 14, 1931, for a supply of 25-cycle power to be delivered in increasing quantities from year to year until a maximum of 125,000 horsepower was reached on November 1, 1936.

These contracts provided that the Commission should accept at the beginning of the fiscal year 1936-1937 a quantity of 25-cycle power for the Niagara system totalling 731,000 horsepower at an annual cost thereafter of $10,965,000.

5. Gatineau Power Company, dated December 28, 1927, for a supply of 60-cycle power for the Eastern Ontario system, increasing from year to year until a maximum of 60,000 horsepower was reached on October 1, 1937.

Revision of Quebec Contracts

Acting on the authority conferred upon it under The Power Commission Act, 1935, which provided that "the Commission may from time to time pay for such power as it deems desirable, and may with the approval of the Lieutenant-Governor in Council enter into contracts therefor," the Commission ceased to take deliveries of or pay for power under the old contracts on November 1, 1935, for all 25-cycle power, specified above.

DISTRIBUTION OF PRIMARY POWER TO SYSTEMS

20-MINUTE PEAK HORSEPOWER—SYSTEM COINCIDENT PRIMARY PEAKS

System	1930	1931	1932	1933	1934	1935	1936
				October			
Niagara system, 25-cycle	879,518	805,630	839,946	848,793	856,434	875,067	935,254
Dominion Power & Trans.	58,579	48,659	43,968	45,710	50,670	54,155	54,021
Georgian Bay system	23,355	26,356	25,666	23,887	24,488	27,534	26,555
Eastern Ontario system	87,990	85,856	80,544	86,890	91,716	103,559	111,421
Thunder Bay system	73,968	51,600	58,140	66,187	60,188	66,823	83,090
Manitoulin rural power dist.				80	88	114	138
Northern Ont. properties:							
Nipissing district	3,745	3,689	3,751	3,539	3,840	3,921	4,115
Sudbury district	12,935	10,724	7,574	12,466	12,466	13,070	14,021
Abitibi district		17,800	11,340	15,777	31,501	43,731	76,944
Espanola district					509	547	101
Patricia district	1,582	1,912	2,048	2,627	2,828	3,512	4,182
St. Joseph district						1,314	1,702
Total	1,141,672	1,052,227	1,072,977	1,105,956	1,134,728	1,193,347	1,311,544
				December			
Niagara system, 25-cycle	902,392	828,200	838,338	879,893	901,877	932,708	1,005,630
Dominion Power & Trans.	61,528	56,166	48,525	51,743	54,021	56,032	55,898
Georgian Bay system	25,591	27,531	26,424	25,496	26,816	27,466	28,512
Eastern Ontario system	93,560	91,253	86,716	91,924	96,783	107,185	119,705
Thunder Bay system	61,300	50,300	55,570	54,704	69,658	65,181	80,858
Manitoulin rural power dist.				84	108	134	143
Northern Ont. properties:							
Nipissing district	3,654	4,088	3,799	3,901	4,008	4,095	4,531
Sudbury district	10,724	11,059	9,853	12,802	13,003	14,008	15,147
Abitibi district		13,000	13,000	14,745	32,842	57,357	73,727
Espanola district					535	533	522
Patricia district	1,521	1,926	2,058	2,735	2,855	3,512	4,062
St. Joseph district						1,394	2,145
Total	1,160,270	1,083,523	1,084,283	1,138,027	1,202,506	1,269,605	1,390,880

NOTE.—The above figures represent primary loads, and are strictly comparable from year to year. The figures which have appeared in this table in earlier years have expressed total loads on the basis in use at the time; for example, on page viii of the 1930 report, the October 1930 load is shown as 1,000,670 horsepower. In addition to the primary load of 879,518 it contained at-will export 113,592 horsepower and a transfer to the Georgian Bay system amounting to 7,560 horsepower. While the latter is a primary obligation upon the Niagara system so far as generating resources go, it does not represent Niagara system load and as this load is included in the Georgian Bay system figures it must be excluded from those of the Niagara system. The correction has been made in all subsequent years.

The 60-cycle power contract with the Gatineau Power Company was re-arranged and the quantity supplied was limited to 42,000 horsepower of firm power as of November 1, 1935, at a price of $12.50 per horsepower per year. Provision was made for reserves of 9,000 horsepower immediate stand-by at $10.00 per horsepower per year, and 9,000 horsepower of general reserve at $1.75 per horsepower per year, until the increasing needs of the Eastern Ontario system required larger supplies of firm power, which, however, were limited to a maximum of 60,000 horsepower.

New contracts for 25-cycle power were drawn during the year under review with the Gatineau Power Company and The James MacLaren Power Company.

DISTRIBUTION OF POWER TO SYSTEMS—TOTAL PRIMARY AND SECONDARY

20-Minute Peak Horsepower—System Coincident Peaks

System	1930	1931	1932	1933	1934	1935	1936
				October			
Niagara system, 25-cycle	1,038,110	860,630	867,446	1,055,697	1,071,046	1,177,346	1,006,166
Dominion Power & Trans.	58,579	48,659	43,968	45,710	50,670	54,155	54,021
Georgian Bay system	23,355	26,356	25,666	23,887	24,488	27,534	26,555
Eastern Ontario system	87,990	85,857	80,544	86,890	121,823	133,733	117,969
Thunder Bay system	73,968	51,600	65,700	90,450	99,866	113,673	133,914
Manitoulin rural power dist.	.....	.....	.....	80	88	114	138
Northern Ont. properties:							
Nipissing district	3,745	3,689	3,751	3,539	3,840	3,921	4,115
Sudbury district	12,935	10,724	7,574	12,466	12,466	13,070	14,021
Abitibi district	.....	17,800	11,340	45,389	64,075	96,814	146.783
Espanola district	.....	.....	.....	.....	509	547	101
Patricia district	1,582	1,912	2.048	2,627	2,828	3,512	4,182
St. Joseph district	.....	.....	.....	.....	.....	1,314	1,702
Total	1,300,264	1,107,227	1,108,037	1,366,735	1,451,699	1,625,733	1,509.667
				December			
Niagara system, 25-cycle	1,073,400	883,200	838,338	1,134,262	1,150,938	1,080,697	1,056,032
Dominion Power & Trans.	61,528	56,166	48,525	51,743	54,021	56,032	55,898
Georgian Bay system	25,591	27,531	26,424	25,496	26,816	27,466	28,512
Eastern Ontario system	93,560	91,253	86,716	116,127	127,849	124,873	125,999
Thunder Bay system	61,300	50,300	63,800	120,000	122,922	125,201	143,432
Manitoulin rural power dist.	.....	.....	.....	84	108	134	143
Northern Ont. properties:							
Nipissing district	3,654	4,088	3,799	3,901	4,008	4,095	4,531
Sudbury district	10,724	11,059	9,853	12,802	13,003	14,008	15,147
Abitibi district	.....	13,000	13,000	46,890	93,029	138,390	157,507
Espanola district	.....	.....	.....	.....	535	533	522
Patricia district	1,521	1,926	2,058	2,735	2,855	3,512	4,062
St. Joseph district	.....	.....	.....	.....	.....	1,394	2,145
Total	1,331,278	1,138,523	1,092,513	1,514,040	1,596,084	1,576,335	1,593,930

Note.—In some instances the above figures differ slightly from those appearing in earlier Annual Reports. Corrections have been made for the transfer of power between the Niagara and Georgian Bay systems; inclusion in the Niagara system of Gatineau resale, and, in the earlier years, using system coincident peaks instead of the sum of the district peaks for the Eastern Ontario system and showing Sudbury and Abitibi as separate districts.

The Gatineau Power Company, under a revised contract, for ten years from November 1, 1935, provided a temporary supply of 201,000 horsepower until May 1, 1936, half of which was used under an arrangement for at-will power for the generation of steam in certain large manufacturing industries in the Niagara peninsula, that had not facilities for the immediate production of steam by the use of coal. The extremely low price obtained for this at-will power, used under steam boilers, did not warrant the Commission in continuing such an unprofitable use of purchased power, except during the summer months of minimum consumption in the various systems.

The Companies to which at-will power was supplied in the Niagara peninsula, having made provision for the generation of steam in their own coal-burning plants, the Commission on May 1, 1936, under the revised contract with the Gatineau Power Company, reduced the supply of firm power taken from the Company to 100,000 horsepower at a price of $12.50 per horsepower per annum, and thereafter until the end of the fiscal year ending October 31, 1936, continued to take 100,000 horsepower of firm 25-cycle power from the Gatineau Power Company, instead of the 260,000 horsepower required under the original contract.

Provision was also made in the revised Gatineau contract for a block of 33,000 horsepower of immediate stand-by power at a price of $10.00 per horsepower per year, and for 127,000 horsepower of general reserve at a price of $1.75 per horsepower per year, to be held at the disposal of the Commission and to be called up as firm power when required.

The James MacLaren Power Company under a revised contract provided a straight delivery of 40,000 horsepower of firm 25-cycle power at a price of $12.50 per horsepower per year for a period of ten years.

No contract revisions were made during the year under review with the Ottawa Valley Power Company or the Beauharnois Light, Heat & Power Company.

Financial Effect of Cancellation and Revision of Quebec Contracts

The result of these re-arrangements of the contracts for purchased power is shown in the following summary of operating results in the Niagara system's business during the fiscal year ending October 31, 1936:

Cost of power purchased under old Quebec contracts during year ending October 31, 1935	$7,936,923
Cost of power purchased under revised contracts during year ending October 31, 1936	2,824,228
Decrease of	$5,112,695

These figures do not fully present the real saving to the municipalities of the Niagara system resulting from the cancellation of the power contracts. Very large additional deliveries, scheduled to take place in November, 1935, and in 1936 prior to October 31, would have increased the cost of power during the year 1935-1936 to $9,500,000, so that the saving under the heading "Power purchased" was in reality slightly over $6,000,000.

The savings thus made permitted the Commission to make an end of withdrawals from the contingencies reserve of the system, applied in the reduction of the cost of power during the years 1932-1935 inclusive. In 1935 the withdrawal had been $2,878,831, and the average annual withdrawal during the four years had totalled $3,132,478.

In addition to ending the drain upon the reserves for the purchase of power that could not be used profitably in the Commission's business, the savings realized during the year under review from the reduction of power purchase obligations, permitted the appropriation of $1,963,599 for stabilization of rates, and a provision for contingencies of $604,475. There had been no provision for contingencies in the Niagara system, other than in the rural districts, since 1931.

Wholesale Cost Reduced

Believing that the very large reductions in the cost of power, obtained through the policy of purchasing only such quantities of firm power and of reserve power as were necessary to the economical and safe operation of the Niagara system, should be passed on to the consumers in the system, the Commission at the end of the year announced that, beginning on November 1, 1936, a reduction of $2.50 per horsepower would be made in the case of power supplied to the co-operating municipalities of the Niagara system. It is not expected that this reduction will absorb all the saving to be secured during the year commencing November 1, 1936, and ending October 31, 1937, but that before the end of that period further reductions in the wholesale cost of power will become possible.

Reserves

Reserves have been set up for depreciation, contingencies, stabilization of rates, sinking fund and insurance purposes totalling in the case of the co-operating municipalities, $82,344,402; for the Northern Ontario properties, $2,130,913; for hydro-electric railways, $165,392; for insurance, workmen's compensation and staff pensions, $5,645,063.55. The reserves of the Commission, therefore, for all purposes total, as of October 31, 1936, $90,285,772.

Sinking Fund

Throughout the changes that have been made in the financial condition of the Niagara system, the sinking fund of the system has been added to strictly in accordance with the provisions of The Power Commission Act. The addition to the Niagara system's sinking fund, during the past year, including interest earned, totals $3,334,447. It stands now at an aggregate amount of $33,960,834. The sinking funds of all other systems have been increased to the full amount required by law during the year.

Annual Adjustments

Credits to the municipalities of the Niagara system under the thirteenth bill totalled $348,724.62 and are participated in by all municipalities of that system except ten. The other systems—Eastern Ontario, Georgian Bay and Thunder Bay—remain in excellent financial condition. There is not a single debit thirteenth bill against any municipality in the Eastern Ontario system, and rebates have been made totalling substantial sums. In the Thunder Bay system the net credit on the year's operations has been such as to warrant material rebates to the consumers which the Commission has recommended should be made at the earliest possible date. Not since 1930 has the Thunder Bay system been so prosperous.

Refunding Provisions

May I again direct the attention of Your Honour and the Members of the Legislature to the working out, during the year under review, of arrangements made with the Treasury Department of Ontario, under which The Hydro-Electric Power Commission will hereafter finance its capital needs by the issue of Commission bonds, bearing the guarantee of the Province of Ontario, instead of through the Provincial Treasury by the issue of bonds of the Province of Ontario, constituting a direct liability of the Government.

The agreement also provides that at the maturity of the various issues of the Province, now outstanding, the Commission shall provide money for

(*Continued on page xvi*)

COMPARATIVE FINANCIAL STATEMENTS

NIAGARA

Year	1930	1931
	$ c.	$ c.
CAPITAL INVESTMENT*	199,799,252.77	208,501,899.28
Power purchased	2,644,916.07	3,979,524.00
Operation, maintenance and administration	5,606,062.59	5,653,006.77
Interest	8,980,374.58	9,502,526.86
Provision for depreciation and obsolescence	1,606,458.27	1,391,105.25
Provision for contingencies	2,893,784.93	617,820.29
Stabilization of rates		
Sinking fund	1,794,591.02	1,872,727.14
TOTAL COST OF POWER	23,526,187.46	23,016,710.31
Less:		
Amount appropriated from the contingencies reserve of the system and applied in reduction of the cost of power		
Net total	23,526,187.46	23,016,710.31
REVENUE from municipalities at interim rates, from rural consumers and from private customers under flat rate contracts	24,467,322.68	23,752,132.85
Net balance credited or charged to municipalities under cost contracts	941,135.22 Credited	735,422.54 Credited

*Exclusive of Government Grant—Rural Lines.

GEORGIAN BAY

Year	1930	1931
	$ c.	$ c.
CAPITAL INVESTMENT*	7,940,666.96	8,203,445.46
Power purchased	53,201.27	64,410.77
Operation, maintenance and administration	360,061.28	438,941.70
Interest	299,428.66	356,655.71
Provision for depreciation and obsolescence	92,375.30	121,800.88
Provision for contingencies	35,695.22	47,827.76
Sinking fund	69,344.10	83,789.13
TOTAL COST OF POWER	910,105.83	1,113,425.95
REVENUE from municipalities at interim rates, from rural consumers and from private customers under flat rate contracts	926,692.34	1,050,823.94
Net balance credited or charged to municipalities under cost contracts	16,586.51 Credited	62,602.01 Charged

*Exclusive of Government Grant—Rural Lines.

RESPECTING THE SYSTEMS OF THE COMMISSION

SYSTEM

1932	1933	1934	1935	1936
$ c.	$ c.	$ c.	$ c.	$ c.
207,977,388.63	208,143,427.49	208,626,540.68	210,332,868.06	210,746,185.54
5,513,435.12	6,738,406.63	6,872,793.14	8,232,968.05†	3,110,848.14‡
4,893,571.40	4,800,173.78	4,821,848.99	4,378,261.93	4,461,243.58
10,691,491.55	10,445,990.16	10,138,022.77	9,891,871.69	10,079,221.26
1,579,701.50	1,628,176.44	1,627,164.82	1,633,187.66	1,631,383.24
118,462.65	125,698.79	129,514.12	133,744.87	604,475.08
....	....	....	....	1,963,599.60
1,977,928.39	1,883,199.99	1,987,207.74	1,973,389.31	2,109,394.94
24,774,590.61	25,621,645 79	25,576,551.58	26,243,423.51	23,960,165.84
2,544,648.63	4,236,606.73	2,869,828.36	2,878,831.21	....
22,229,941.98	21,385,039.06	22,706,723.22	23,364,592.30	23,960,165.84
22,459,448.97	21,096,722.06	22,543,780.63	23,292,490.97	24,365,449.12
229,506.99 Credited	288,317.00 Charged	162,942.59 Charged	72,101.33 Charged	405,283.28 Credited

†Includes 296,045.47 purchased from Canadian Niagara Power Co., 1935.
‡Includes 286,620.10 purchased from Canadian Niagara Power Co., 1936.

SYSTEM

1932	1933	1934	1935	1936
$ c.	$ c.	$ c.	$ c.	$ c.
8,329,025.78	8,394,645.25	8,427,278.77	8,478,201.80	8,615,788.28
18,810.77	27,316.52	43,832.70	39,281.63	53,545.91
483,137.12	440,008.76	409,286.71	384,446.80	379,933.24
412,557.36	396,690.67	380,745.19	371,615.62	402,626.68
124,737.66	128,111.66	129,844.11	131,083.26	131,661.80
54,229.21	57,148.73	43,570.17	44,390.15	28,079.05
86,698.15	87,826.94	88,348.64	88,746.21	89,697.31
1,180,170.27	1,137,103.28	1,095,627.52	1,059,563.67	1,085,543.99
1,161,831.25	1,163,135.32	1,181,960.85	1,154,986.69	1,137,998.72
18,339.02 Charged	26,032.04 Credited	86,333.33 Credited	95,423.02 Credited	52,454.73 Credited

COMPARATIVE FINANCIAL STATEMENTS

EASTERN ONTARIO

Year	1930	1931
	$ c.	$ c.
CAPITAL INVESTMENT*	20,027,578.12†	20,689,225.27†
Power purchased	522,732.86	637,903.94
Operation, maintenance and administration	934,766.36	981,514.88
Interest	913,872.57	938,745.56
Provision for depreciation and obsolescence	214,924.91	241,193.70
Provision for contingencies	115,160.41	110,668.22
Sinking fund	158,835.47	167,272.84
TOTAL COST OF POWER	2,860,292.58	3,077,299.14
Appropriated from contingencies reserve to cover shortage on operation of local distribution systems		
Net total	2,860,292.58	3,077,299.14
REVENUE from municipalities at interim rates, from rural consumers and from private customers under flat rate contracts	3,051,987.02	3,232,921.80
Excess revenue over cost of power	191,694.44	155,622.66
Profit from sale of power to companies and/or local distribution systems, transferred to contingencies reserve	117,244.91	136,927.20
Net balance credited to municipalities under cost contracts	74,449.53	18,695.46

*Exclusive of Government Grant—Rural Lines.

THUNDER BAY

Year	1930	1931
	$ c.	$ c.
CAPITAL INVESTMENT..*	17,645,796.31	18,406,363.39
Power purchased	474.00	
Operation, maintenance and administration	225,693.87	217,397.15
Interest	655,340.84	879,477.46
Provision for depreciation and obsolescence	112,798.56	151,173.65
Provision for contingencies	346,252.43	
Sinking fund	137,011.32	135,813.13
TOTAL COST OF POWER	1,477,571.02	1,383,861.39
Amount appropriated from contingencies reserve of the system and applied in reduction of the cost of power		
Net total	1,477,571.02	1,383,861.39
REVENUE from municipalities at interim rates, from rural consumers and from private customers under flat rate contracts	1,481,978.47	1,339,046.63
Net balance credited or charged to municipalities under cost contracts	4,407.45 Credited	44,814.76 Charged

*Exclusive of Government Grant—Rural Lines.

RESPECTING THE SYSTEMS OF THE COMMISSION

SYSTEM

1932	1933	1934	1935	1936
$ c.	$ c.	$ c.	$ c.	$ c.
20,179,282.12†	18,491,291.60†	18,970,080.28†	19,214,999.94†	19,504,226.762†
698,627.59	777,050.62	833,980.26	849,295.63	869,352.72
918,978.04	761,603.57	724,389.50	719,353.15	819,378.24
968,995.87	894,253.67	913,406.78	848,533.52	889,036.20
248,330.65	227,793.09	242,903.39	250,839.49	251,545.62
119,387.64	83,188.62	84,924.08	86,456.30	57,884.54
171,432.37	173,029.78	174,813.02	184,228.67	187,230.65
3,125,752.16	2,916,919.35	2,974,417.03	2,938,706.76	3,074,427.97
		115.28		
3,125,752.16	2,916,919.35	2,974,301.75	2,938,706.76	3,074,427.97
3,199,177.07	2,920,450.19	3,084,008.59	3,182,930.67	3,263,920.73
73,424.91	3,530.84	109,706.84	244,223.91	189,492.76
48,122.89	1,281.64			
25,302.02	2,249.20	109,706.84	244,223.91	189,492.76

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†These figures do not include the expense of the St. Lawrence and Ottawa River surveys —included in previous Reports. See page xvii.

SYSTEM

1932	1933	1934	1935	1936
$ c.	$ c.	$ c.	$ c.	$ c.
18,480,738.51	18,630,772.18	18,679,610.73	18,669,882.13	18,820,351.23
203,224.26	214,729.82	215,991.04	225,840.86	242,644.51
1,017,730.35	972,869.43	912,622.62	897,013.99	897,562.99
147,471.19	149,518.82	160,490.28	160,523.21	159,401.00
132.36	869.29	1,140.37	1,190.36	85,856.94
137,066.04	140,993.98	148,323.24	148,735.40	148,812.06
1,505,624.20	1,478,981.34	1,438,567.55	1,433,303.82	1,534,277.50
143,499.15	41,359.65			
1,362,125.05	1,437,621.69	1,438,567.55	1,433,303.82	1,534,277.50
1,235,438.17	1,380,099.79	1,383,066.52	1,436,074.07	1,565,806.81
126,686.88 Charged	57,521.90 Charged	55,501.03 Charged	2,770.25 Credited	31,529.31 Credited

the redemption of that portion of such obligations used by the Province to provide capital for The Hydro-Electric Power Commission's operations.

From the time of the inauguration of this plan until October 31, 1936, the Commission has repaid to the Government, and through it to the holders of bonds of the Province of Ontario, the sum of $22,813,942, as follows:—

1935	December 1	$7,436,297.86
	December 31	4,000,000.00
1936	March 31	999,603.01
	May 2	6,698,672.36
	May 4	1,174,001.16
	June 1	643,558.51
	August 30	680,295.59
	September 12	1,181,503.81

These sums paid in retirement of the debt, reduced the net debt of the Commission to the Government from $185,171,051 as of October 31, 1935, to $162,357,109, as of October 31, 1936.

Rural Power

There are 174 operating rural power districts and power is delivered to approximately 74,000 rural consumers, comprising farms and dwellings in various groups. The consumers are situated in 369 townships and 96 police villages and are served over networks of rural primary lines, which aggregate nearly 10,800 miles. In addition to the 369 townships served by rural power districts, 10 townships are served jointly by rural power districts and voted areas.

The demand for power by rural consumers during the year has been unusually high. During the month of October an aggregate load of 42,897 horsepower was delivered; an increase of 15.3 per cent over the load delivered during the same month in the previous year.

A further reduction in the service charge to farm consumers was ordered to become effective on December 1, 1936. The "small" and "light" farm service charges have been reduced from $2.00 to $1.00 per month net, and all other farm service charges will receive a reduction of 25 per cent from existing standard maximum rates.

The demand for rural service continues and indications are that during the year 1937 approximately 10,000 consumers will apply for service. These applications will necessitate the construction of more than 1,500 miles of additional rural primary lines.

Provincial Assistance for Rural Service

Provincial grants amounting to one-half of the cost of primary and secondary rural lines have been received for the construction of these lines during the year. The total grants received since 1921 amounted to $10,232,098.78, which grants have been divided among the various systems, as follows:

Niagara	$7,272,457.50
Georgian Bay	942,627.53
Eastern Ontario	1,894,965.47
Thunder Bay	62,391.94
Manitoulin R.P.D.	29,860.88
Northern Ontario Properties	29,795.46
Total	$10,232,098.78

CAPITAL INVESTMENT

The total investment of The Hydro-Electric Power Commission of Ontario in power undertakings and hydro-electric railways is $297,864,134.93, exclusive of government grants in respect of construction of rural power districts' lines ($10,232,098.78); and the investment of the municipalities in distributing systems and other assets is $115,845,676.42, making in power and hydro-electric railway undertakings a total investment of $413,709,811.35.

The following statement shows the capital invested in the respective systems, districts and municipal undertakings, etc.:

Niagara system (including Hamilton street railway)	$210,746,185.54
Georgian Bay system	8,615,788.28
Eastern Ontario system	19,504,226.76
Thunder Bay system	18,820,351.23
Manitoulin rural power district	35,722.19
Nipissing rural power districts	30,539.20
Bonnechere storage	51,741.88
Office and service buildings	3,104,154.23
Construction plant and inventories	1,881,575.41
Preliminary surveys—St. Lawrence and Ottawa rivers	881,494.84
	$263,671,779.56
Northern Ontario properties—Operated by H-E.P.C. on behalf of the Province of Ontario	31,839,796.66
Guelph Radial Railway—Operated by H-E.P.C. on behalf of the Municipality of Guelph	447,556.71
Toronto-Port Credit-St. Catharines Radial Railways	1,905,002.00
	$297,864,134.93
Municipalities' distribution systems—all systems	93,438,204.30
Other assets of municipal Hydro utilities (exclusive of $36,193,874.21 of municipal sinking-fund equity in H-E.P.C. system)—all systems	22,407,472.12
	$413,709,811.35

RESERVES OF COMMISSION AND MUNICIPAL ELECTRIC UTILITIES

The total reserves of the Commission and the municipal electric utilities for depreciation, contingencies, stabilization of rates, sinking fund and insurance purposes amount to $165,473,742.46, made up as follows:

Niagara system	$65,716,063.88
Georgian Bay system	3,813,421.17
Eastern Ontario system	7,403,232.34
Thunder Bay system	4,521,099.79
Manitoulin rural power district	8,289.00
Nipissing rural power districts	11,087.37
Office and service buildings and equipment	861,803.60
Bonnechere storage	9,405.55
Total reserves in respect of Commission's properties	$82,344,402.70
Northern Ontario properties	2,130,913.99
Hydro-electric railways (Guelph)	165,392.22
Insurance, workmen's compensation and staff pensions	5,645,063.55
Total reserves of the Commission	$90,285,772.46
Total reserves and surplus of municipal electric utilities	75,187,970.00
Total Commission and municipal reserves	$165,473,742.46

Revenue of Commission

The revenue of the Commission at interim rates from the municipal utilities operating under cost contracts, from customers in rural power districts and from other customers with whom—on behalf of the municipalities—the Commission has special contracts, all within the Niagara, Georgian Bay, Eastern Ontario and Thunder Bay systems, Manitoulin Island and Nipissing rural power districts aggregates $30,358,067.49. The revenue of the Commission from customers served by the Northern Ontario properties, which are held and operated in trust for the Province, is $2,242,238.64, making a total of $32,600,306.13.

Summarized operating results of these systems and rural power districts, and of the Northern Ontario properties, follow:

SUMMARIZED OPERATING RESULTS
OF THE
NIAGARA, EASTERN ONTARIO, GEORGIAN BAY, THUNDER BAY SYSTEMS
AND ALSO
BONNECHERE STORAGE SYSTEM, NIPISSING AND MANITOULIN RURAL POWER DISTRICTS

Revenue from municipal electric utilities and other power customers		$27,357,317.45	
Revenue from customers in rural power districts		3,000,750.04	
Total revenue, systems and rural			$30,358,067.49
Operation, maintenance, administration, interest and other current expenses		$22,224,385.44	
Provision for reserves—			
Depreciation and obsolescence	$2,176,124.27		
Contingencies	776,295.61		
Stabilization of rates	1,963,599.60		
Sinking fund	2,537,548.94		
		7,453,568.42	
			29,677,953.86
Net balance credited to municipalities under cost contracts			$680,113.63

OPERATING RESULTS OF THE NORTHERN ONTARIO PROPERTIES

Revenue from customers			$2,242,238.64
Operation, maintenance, administration, interest and other current expenses		$1,651,494.58	
Provision for reserves—			
Depreciation and obsolescence	$234,405.34		
Contingencies	27,199.64		
Sinking fund	377,670.61		
		639,275.59	
			2,290,770.17
Deficiency after sinking fund appropriation			$48,531.53

RURAL POWER DISTRICTS—OPERATIONS FOR THE YEAR 1936

	Niagara system	Georgian Bay system	Eastern Ontario system	Thunder Bay system	Manitoulin rural power district	Nipissing rural power districts	Totals
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Cost of power as provided to be paid under Power Commission Act	961,373.80	118,260.48	198,483.81	4,668.63	3,750.00	5,581.98	1,292,118.70
Cost of operation, maintenance and administration	468,336.43	61,721.90	123,598.54	4,087.35	1,216.99	3,226.63	662,187.84
Interest	347,175.94	45,190.96	86,798.71	2,940.71	1,523.98	1,360.01	484,990.31
Depreciation and obsolescence	246,593.95	31,705.13	64,032.92	1,067.08	1,147.70	984.91	345,531.69
Sinking fund	75,139.12	10,066.12	19,654.31	642.08	376.15	300.23	106,178.01
Total expenses	2,098,619.24	266,944.59	492,568.29	13,405.85	8,014.82	11,453.76	2,891,006.55
Revenue from customers	2,187,520.92	263,578.21	514,902.54	13,926.24	8,864.56	11,957.57	3,000,750.04
Balances credited to districts or charged to municipalities comprising districts:							
Net credit, all districts	88,901.68		22,334.25	520.39	849.74	503.81	113,109.87
Net charge, all districts		3,366.38					3,366.38
Net credit, all systems							109,743.49

MUNICIPAL ELECTRIC UTILITIES

The following is a summation of the year's operation of the local electric utilities conducted by municipalities receiving power under cost contracts with the Commission:

Total revenue collected by the municipal electric utilities		$34,408,163.84
Cost of power	$20,486,582.65	
Operation, maintenance and administration	5,420,667.08	
Interest	1,893,304.28	
Sinking fund and principal payments on debentures	2,448,223.80	
Depreciation and other reserves	2,230,021.86	
Total		32,478,799.67
Surplus		$1,929,364.17

With regard to the local Hydro utilities operating under cost contracts, the following statements summarize for each of the four cooperative systems administered by the Commission, the financial status and the year's operations as detailed in Section X of the Report.

NIAGARA SYSTEM

The total plant assets of the Niagara system utilities amount to $79,757,601.66. The total assets, including an equity in the H-E.P.C. of $31,862,420.08 aggregate $129,324,426.65. The reserves and surplus accumulated in connection with the local utilities, exclusive of the equity in the H-E.P.C., amount to $60,544,603.02, an increase of $4,739,061.93 during the year 1936. The percentage of net debt to total assets is 30.8, a reduction of 4.0 per cent.

The total revenue of the municipal electric utilities served by this system was $27,992,780.11, an increase of $913,104.25, as compared with the previous year. After meeting all expenses in respect of operation, ncluding interest, setting up the standard depreciation reserve amounting to $1,726,095.53, and providing $2,245,077.15 for the retirement of instalment and sinking fund debentures, the total net surplus for the year for the municipal electric utilities served by the Niagara system amounted to $1,250,210.02, as compared with $587,620.62 the previous year.

Georgian Bay System

The total plant assets of the Georgian Bay system utilities amount to $2,762,733.07. The total assets, including an equity in the H-E.P.C. of $1,185,337.97 aggregate $4,560,722.42. The reserves and surplus accumulated in connection with the local utilities, exclusive of the equity in H-E.P.C., amount to $2,841,928.65, an increase of $133,843.03 during the year 1936. The percentage of the net debt to total assets is 15.6, a reduction of 3.2 per cent.

The total revenue of the municipal electric utilities served by this system was $1,193,781.69, an increase of $14,172.13, as compared with the previous year. After meeting all expenses in respect of operation, including interest, setting up the standard depreciation reserve amounting to $80,536.06, and providing $56,213.40 for the retirement of instalment and sinking fund debentures, the total net surplus for the year for the municipal electric utilities served by the Georgian Bay system amounted to $102,948.47, as compared with $113,088.26 the previous year.

Eastern Ontario System

The total plant assets of the Eastern Ontario system utilities amount to $7,827,749.41. The total assets, including an equity in the H-E.P.C. of $1,493,643.75, aggregate $11,933,214.40. The reserves and surplus accumulated in connection with the local utilities, exclusive of the equity in H-E.P.C., amount to $8,095,790.08, an increase of $602,851.71 during the year 1936. The percentage of net debt to total assets is 15.9, a reduction of 2.5 per cent.

The total revenue of the municipal electric utilities served by this system was $3,526,475.11, an increase of $79,348.98, as compared with the previous year. After meeting all expenses in respect of operation, including interest, setting up the standard depreciation reserve amounting to $202,522.15, and providing $116,697.42 for the retirement of instalment and sinking fund debentures, the total net surplus for the year for the municipal electric utilities served by the Eastern Ontario system amounted to $418,299.40, as compared with $426,949.79 the previous year.

Thunder Bay System

The total plant assets of the Thunder Bay system utilities amount to $2,535,031.47. The total assets, including an equity in the H-E.P.C. of $1,652,472.41, aggregate $5,549,207.90. The reserves and surplus accumulated in connection with the local utilities, exclusive of the equity in H-E.P.C., amount to $3,312,080.45, an increase of $212,135.95 during the year 1936. The percentage of net debt to total assets is 9.8, a reduction of 1.9 per cent.

The total revenue of the municipal electric utilities served by this system was $1,325,069.51, an increase of $21,541.89, as compared with the previous year. After meeting all expenses in respect of operation, including interest, setting up the standard depreciation reserve amounting to $41,282.93, and providing $12,346.49 for the retirement of instalment and sinking fund debentures, the total net surplus for the year for the municipal electric utilities served by the Thunder Bay system amounted to $117,181.35, as compared with $119,890.66 the previous year.

* * *

My colleagues, the Honourable A. W. Roebuck, K.C., and the Honourable T. B. McQuesten, K.C., again join with me in expressing our appreciation of the close and most efficient co-operation of the Heads of Departments, and the officials generally of the Commission, in carrying to a successful issue the negotiations for the revisions of power contracts and the other important operations of the past year.

Many serious problems from time to time confront the Operating Department especially, from causes entirely beyond human control. The Commission has been fortunate, during the year under review, in freedom from serious ice troubles. The drought in Central Ontario, however, during midsummer of 1936, required the adoption of emergency measures, to provide from the Ottawa river energy for the operation of the industries of the Trent valley, that could not be supplied from power plants located on the line of the Trent river and its tributaries.

Had this power not been available most of the factories in the Midland district of Eastern Ontario would have been under the necessity of shutting down for considerable periods, at a great loss alike to employers and employees. The Commission desires to express its thanks to the resourceful and energetic members of its Staff, who found a way to avoid this industrial set-back.

A marked increase in the operation of heavy iron and steel industries resulted, before the end of the year, in a very considerable increase in the industrial power loads of the Commission, chiefly in the Niagara and Eastern Ontario systems. There has been continuous increase in the use of electric energy in the northern gold fields. This has been made possible almost to an equal extent by the increase in the price of gold to $35.00 per ounce and by a supply of power, chiefly from the Commission's plants, at a standard price ranging from $32.50 to $35.00 per horsepower, according to voltage, for the energy required in the operation of the mines. Operating together, these two factors have made possible the opening up of great deposits of marginal ore that could not have been profitably turned into bullion, when gold was worth $20.00 an ounce and power was supplied generally at $50.00 per horsepower. The conjunction of high gold prices and low power prices in Northern Ontario has been one of the principal elements in bringing about the marked recovery in industry throughout the Province experienced during the past year.

Respectfully submitted,

T. STEWART LYON,
Chairman

Toronto, Ontario, April, 30th, 1937.

T. Stewart Lyon, Esq.,

Chairman, The Hydro-Electric Power Commission of Ontario,
Toronto, Ontario.

Sir,—I have the honour to submit the Twenty-Ninth Annual Report of The Hydro-Electric Power Commission of Ontario. The Report covers the operations of the Commission for the fiscal year which ended October 31, 1936, both with regard to the supply of power to, or on behalf of, the partner municipalities of the several co-operative systems, as well as the administration, on behalf of the Provincial Government, of the Northern Ontario Properties.

During the year the work of the Commission in connection with the Northern Ontario Properties has been of growing relative importance and throughout the Report references to physical and financial matters appertaining to these properties are clearly distinguished.

The Report also records in some detail the work of the Commission in the distribution of electrical service to customers in rural power districts, and in Section X are incorporated financial statements and statistical data relating to the "Hydro" utilities of the partner municipalities.

I have the honour to be,

Sir,

Your obedient servant,

A. Murray McCrimmon,

Secretary and Controller

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TWENTY- NINTH ANNUAL REPORT

OF

The Hydro-Electric Power Commission of Ontario

FOREWORD

and

Guide to the Report

THE Hydro-Electric Power Commission of Ontario administers a co-operative municipal-ownership enterprise, supplying power throughout the Province of Ontario. The Commission was created in 1906 by special act of the Legislature and followed investigations by advisory commissions appointed as a result of public agitation to prevent monopoly and to provide a more satisfactory supply of low cost power in Southern Ontario. In 1907 The Power Commission Act (7-Edward VII Ch. 19) was passed amplifying and extending the Act of 1906 and this Act—modified by numerous amending acts which now form part of the Revised Statutes of Ontario, 1927, Chap. 57—constitutes the authority under which the Commission operates.

The Hydro-Electric Power Commission of Ontario consists of a Chairman and two Commissioners, all of whom are appointed by the Lieutenant-Governor-in-Council to hold office during pleasure. One of the Commissioners must be a member of the Executive Council and two may be members.

In 1909, work was commenced on a comprehensive transmission system and by the end of 1910 power was being supplied to several municipalities.

The Commission has now been supplying electrical energy for more than twenty-six years and the Report contains diagrams depicting the growth of the enterprise. During this period the costs of electricity to the consumer have been substantially reduced and the finances of the enterprise have been established on a secure foundation.

At the end of 1936 the Commission was serving 782 municipalities in Ontario. This number included 26 cities, 98 towns, 275 villages and police villages and 383 townships. With the exception of 14 suburban sections of townships known as "voted areas," the townships and 96 of the smaller villages are served as parts of 174 rural power districts.

Financial Features

The basic principle governing the financial operations of the undertaking is, that electrical service be given by the Commission to the municipalities and by the municipalities to the ultimate consumers at cost. Cost includes not only all operating and maintenance charges, interest on capital investment and reserves for renewals or depreciation and for obsolescence and contingencies, but also a reserve for sinking fund or capital payments on debentures.

The undertaking from its inception has been entirely self-supporting and no contributions have been made from general taxes except in connection with service in rural power districts. In this case, the Province, in pursuance of its long established policy of assisting agriculture and with the approval of the urban citizens, assists extension of rural electrical service by a grant-in-aid of the capital cost and in other ways as specified and detailed in the Report

As the principle of "service at cost" is radically different from that obtaining in private organizations, where profit is the governing feature, it naturally results in different and in some ways unique administrative features.

The undertaking as a whole involves two distinct phases of operations as follows:

The FIRST phase of operations is the provision of the electrical power—either by generation or purchase—and its transformation, transmission and delivery in *wholesale* quantities to individual municipal utilities, to large industrial consumers, and to rural power districts. This phase of the operations is performed by The Hydro-Electric Power Commission of Ontario as trustee for the municipalities acting collectively in groups or "systems," and the financial statements relating to these collective activities of the municipalities are presented in Section IX of the Report. Each system of municipalities, as provided in *The Power Commission Act*, forms an independent financial unit and the accounts are therefore segregated and separately presented for each system. In order, however, that there may be a comprehensive presentation of the co-operative activities of the undertaking as a whole, there are presented, in addition, for the four main systems and miscellaneous co-operative activities, a balance sheet of assets and liabilities, a summary combined operating and income account and a summary combined statement respecting the various reserves.

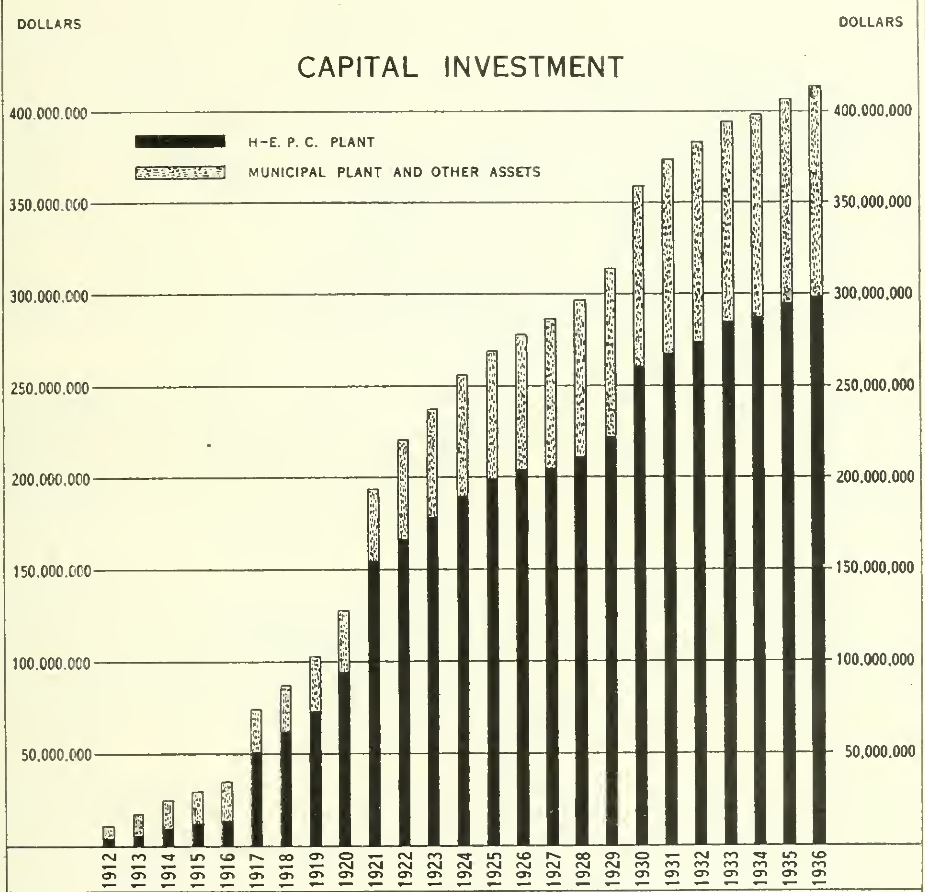
For the Northern Ontario properties operated by the Commission on behalf of the Province there are also presented in Section IX financial statements including a balance sheet; an operating and income account, and statements respecting reserves and capital expenditures.

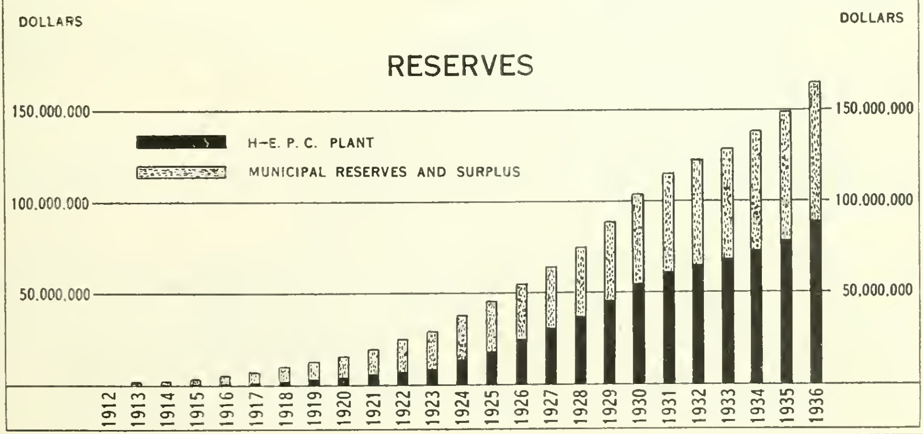
The SECOND phase of operation is the *retail* distribution of electrical energy to consumers within the limits of the areas served by the various municipal utilities and rural power districts. In the case of rural power districts, which usually embrace portions of more than one township, The Hydro-Electric Power Commission not only provides the power at wholesale, but also—on behalf of the respective individual townships—attends to all physical and financial operations connected with the distribution of energy at retail to the consumers within the rural power districts. The financial statements relating to the rural power districts are also presented in Section IX of the Report.

In the case of cities, towns, many villages and certain thickly populated areas of townships, retail distribution of electrical energy provided by the Commission is in general conducted by individual local municipal utility commissions under the general supervision of The Hydro-Electric Power Commission of Ontario. The balance sheets, operating reports and statistical data relating to the individual urban electrical utilities are presented in Section X of the Report.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

TWENTY-FIVE YEARS RECORD — ALL SYSTEMS





Further details respecting administration, and explanations of the financial tables presented in the Report are given in the introductions to sections IX and X on pages 159 and 293.

Systems Operating

From time to time in accordance with provisions in *The Power Commission Act* various groups of municipalities have been co-ordinated to form systems for the purpose of obtaining power supplies from convenient sources. In some cases these small systems grew until their transmission lines interlocked with those of adjacent systems and it proved beneficial to consolidate the transmission networks and the financial and administrative features. In the well settled parts of the Province, known as Old Ontario, this process has now reached a more stable condition and the municipalities of the southern part of the Province are now combined in three systems: the Niagara system, the Georgian Bay system and the Eastern Ontario system. One other system of partnership municipalities is known as the Thunder Bay system.

The Niagara System is the largest and most important system. It embraces municipalities in all the territory between Niagara Falls, Hamilton and Toronto on the east and Windsor, Sarnia and Goderich on the west. It is served with electrical energy generated at plants on the Niagara river, supplemented with power transmitted from generating plants on the Ottawa river and with power purchased from Quebec companies.

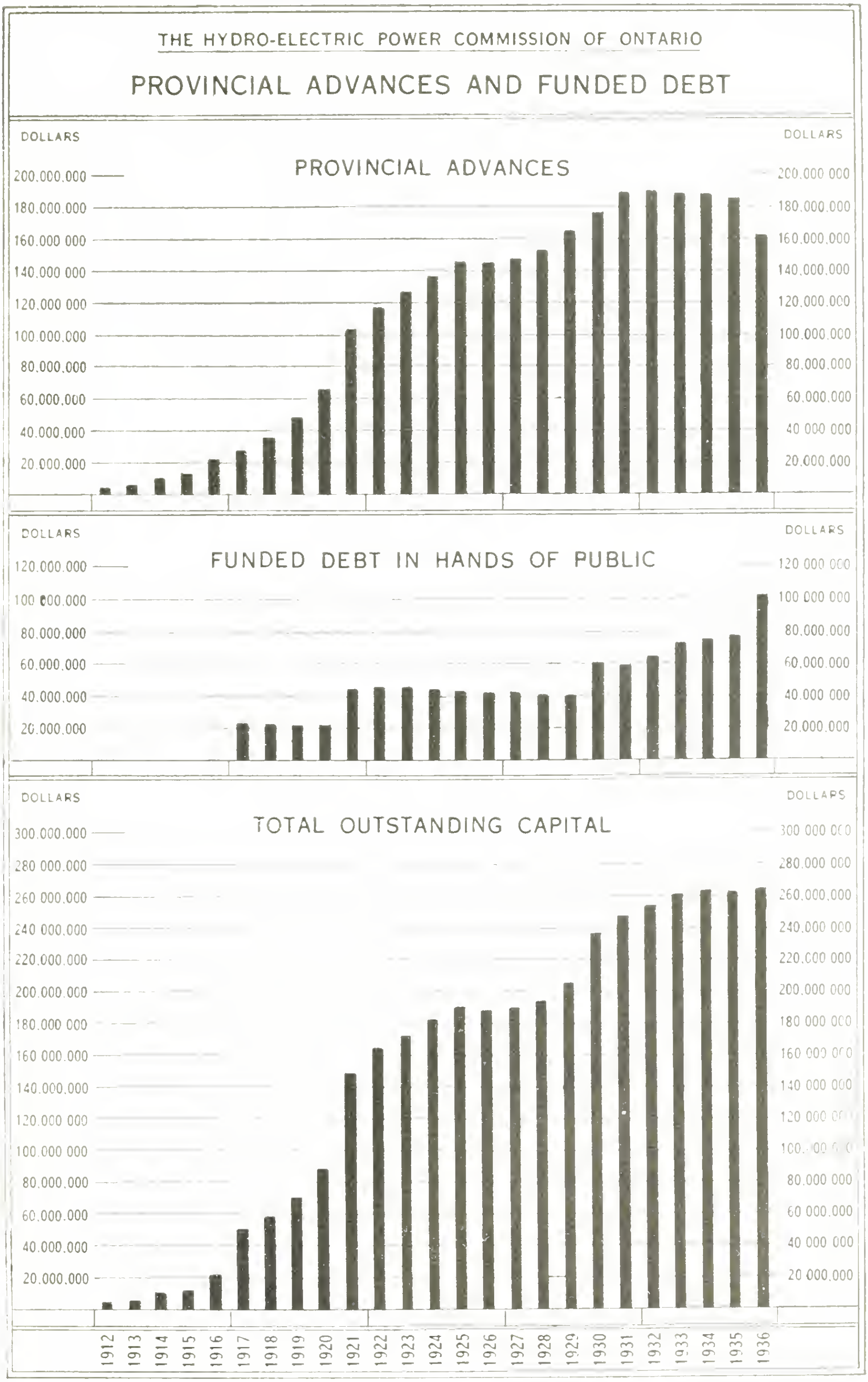
The Georgian Bay System comprises municipalities in that part of the Province which surrounds the southern end of Georgian bay and lies to the north of the territory served by the Niagara system. It includes the districts surrounding lake Simcoe and extends as far north as Huntsville in the Lake of Bays district and south to Port Perry. Its power supplies are derived chiefly from local water power developments.

The Eastern Ontario System serves all of Ontario east of the areas comprising the Georgian Bay and the Niagara systems. It includes the districts of Central Ontario, St. Lawrence, Rideau, Ottawa and Madawaska; formerly separate systems. Its power supplies are from local developments supplemented by purchases from other sources.

The Thunder Bay System comprises the cities of Port Arthur and Fort William, adjacent rural sections and the village of Nipigon. Two developments on the Nipigon river supply power.

A small rural district known as *Manitoulin Rural Power District* on Manitoulin island in the northern area of lake Huron is served by the Commission as an independent unit.

Northern Ontario Properties. In addition to its operations on behalf of the partner municipalities, the Commission, under an agreement with the Province, holds and operates the Northern Ontario Properties in trust for the Province. For the purposes of financial administration these properties are treated as one unit. The Northern Ontario Properties lie in the portion of the Province north of Lake Nipissing and French River areas, exclusive of the territory served by the Thunder Bay system. The principal areas in


THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO
PROVINCIAL ADVANCES AND FUNDED DEBT
DOLLARS
PROVINCIAL ADVANCES
200.000.000
180.000.000
160.000.000
140.000.000
120.000.000
100.000.000
80.000.000
60.000.000
40.000.000
20.000.000
FUNDED DEBT IN HANDS OF PUBLIC
120.000.000
100.000.000
80.000.000
60.000.000
40.000.000
20.000.000
TOTAL OUTSTANDING CAPITAL
300.000.000
280.000.000
260.000.000
240.000.000
220.000.000
200.000.000
180.000.000
160.000.000
140.000.000
120.000.000
100.000.000
80.000.000
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1936

this vast territory at present receiving service are the *Nipissing District* centering around the city of North Bay on the shore of lake Nipissing; the *Sudbury District* comprising the city of Sudbury and the adjacent mining area known as Sudbury Basin; the *Abitibi District* comprising the territory served by 25-cycle power from the Abitibi Canyon development; the *Espanola District* in the southern portion of the district of Sudbury serving mining properties with 60-cycle power; the *Patricia District* comprising the territory within transmission distance of the Ear Falls development at the outlet of Lac Seul on the English river including the Red Lake mining area, and *St. Joseph District* comprising the territory immediately north of lake St. Joseph in the territorial district of Patricia served with power from a development at Rat Rapids on the Albany river.

The geographic boundaries of the various systems are shown on the map of transmission lines and station at the back of the Report.

The power supplies for the systems and Northern Ontario districts are listed in the first table of Section II of the Report on pages 10 and 11.

The Annual Report

The table of contents, pages xxiii and xxiv lists the matters dealt with in the Report. At the end of the Report there is a comprehensive index. To those not conversant with the Commission's Reports, the following notes will be useful.

In Section II, pages 8 to 62, dealing with the operations of the systems, are a number of diagrams showing graphically the monthly loads on the several systems and districts. Tables are also presented showing the amounts of power taken by the various municipalities in October during the past three years.

The rural distribution work of the Commission has proved of widespread interest and special reference to this is made in Section III on pages 86 to 106.

In Sections IV, V and VI will be found information respecting progress of work on new power developments and on transmission system extensions, together with photographic illustrations.

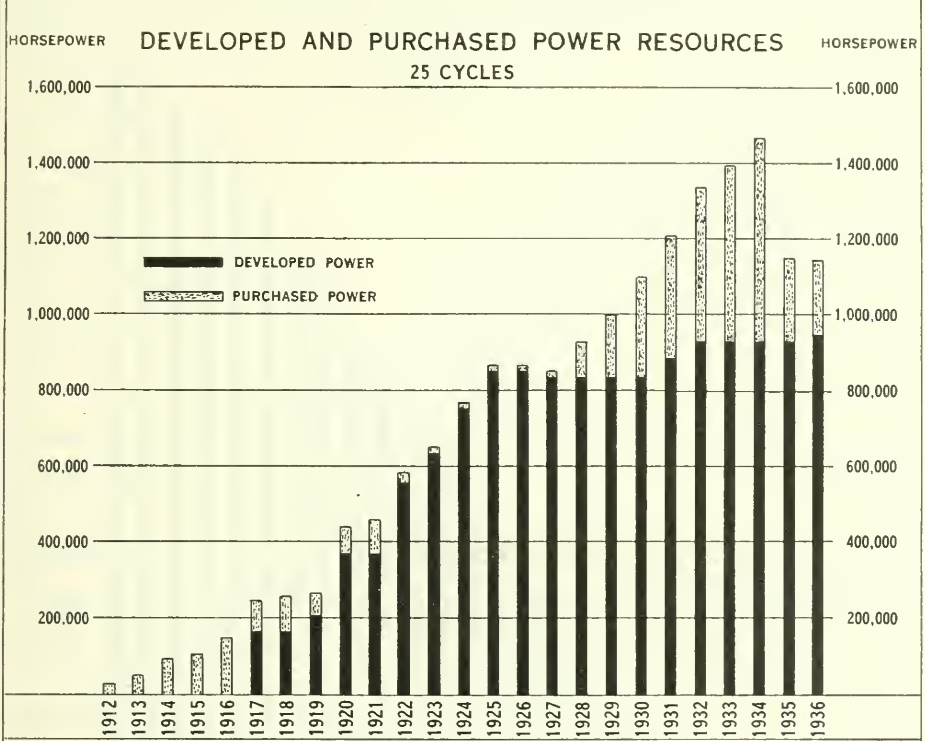
About one-half of the Report is devoted to financial and other statistical data which are presented in two sections IX and X already referred to above.

Frequent enquiries for the rates for service to consumers are received by the Commission. For the urban municipalities served by the Commission these are given in statement "E" starting on page 438. For the rural power districts they are given in a table starting on page 100. Certain statistical data resulting from the application of the rates in urban utilities are given in statement "D". This statement is prefaced by a special introduction starting on page 420.

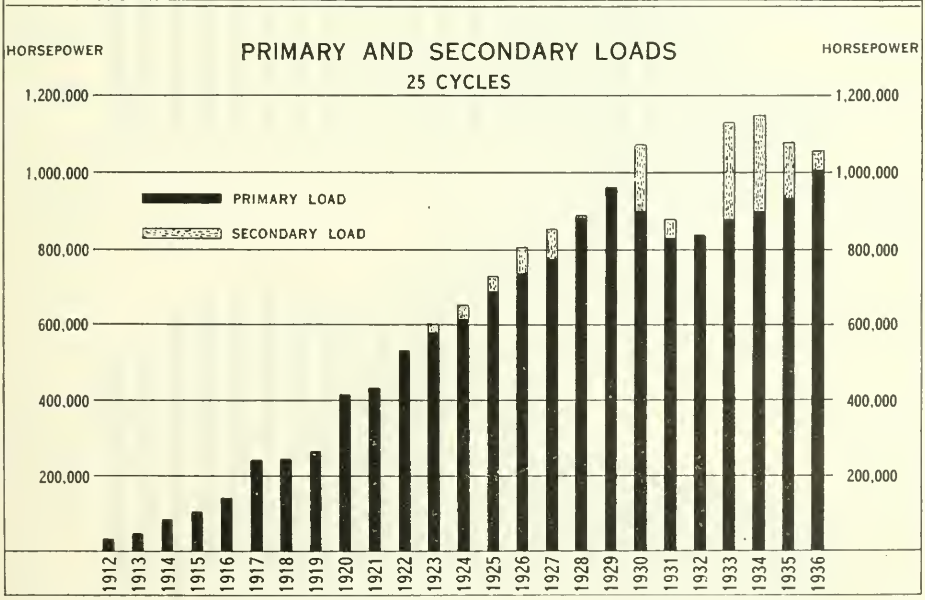
In its Annual Reports the Commission aims to present a comprehensive statement respecting the activities of the whole undertaking under its administration. Explanatory statements are suitably placed throughout the Report. The Commission receives many letters asking for general information respecting its activities, as well as requests for specific information concerning certain phases of its operations. In most cases these enquiries can satisfactorily be answered by simply directing attention to information presented in the Annual Report.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

TWENTY-FIVE YEARS RECORD—NIAGARA SYSTEM

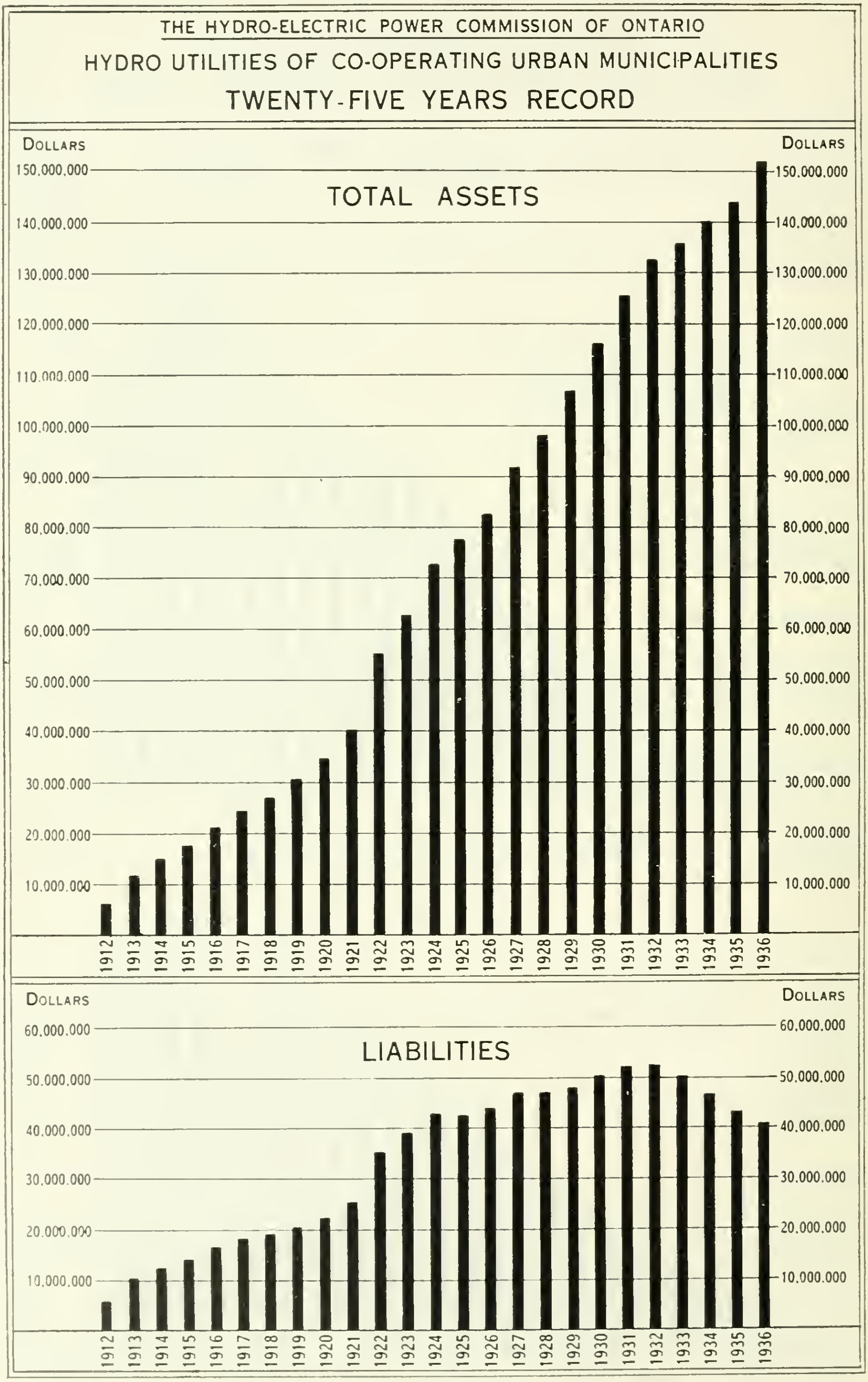


DEVELOPED AND PURCHASED POWER RESOURCES
25 CYCLES



PRIMARY AND SECONDARY LOADS
25 CYCLES

NOTE: Diagram depicts conditions for December, which correspond closely to winter peak conditions



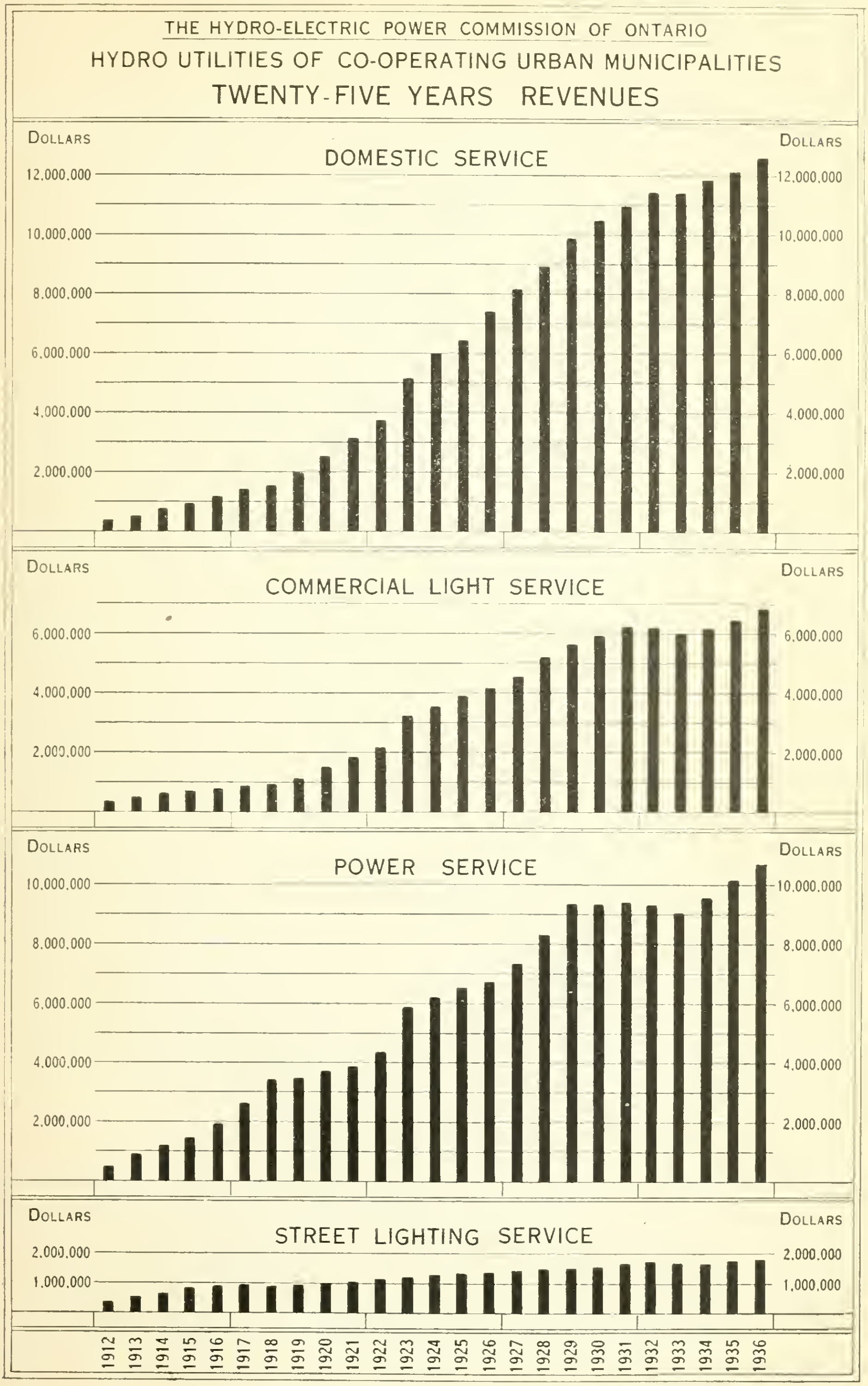
THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

HYDRO UTILITIES OF CO-OPERATING URBAN MUNICIPALITIES

TWENTY-FIVE YEARS RECORD

TOTAL ASSETS

LIABILITIES



THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO
HYDRO UTILITIES OF CO-OPERATING URBAN MUNICIPALITIES
TWENTY-FIVE YEARS REVENUES

SECTION I

LEGAL

AT the 1936 Session of the Legislative Assembly of the Province of Ontario one Act respecting The Hydro-Electric Power Commission of Ontario was passed. It is reproduced in full in Appendix I of this Report. The short title of the said Act is as follows:

The Power Contracts Validation Act, 1936, Chapter 49.

The agreements between The Hydro-Electric Power Commission of Ontario and municipalities and corporations mentioned in the list hereunder given were approved by Order-in-Council, dated the 24th day of November, 1936.

TOWNSHIPS

Township of Albemarle	May	23, 1936
Township of Bruce	October	20, 1936
Township of Cumberland	November	4, 1935
Township of Cumberland	February	3, 1936
Township of Draper	October	21, 1936
Township of Kincardine	November	27, 1935
Township of Marlborough	June	6, 1936
Township of Marmora and Lake	June	2, 1936
Township of Proton	December	7, 1935
Township of South Cayuga	May	27, 1936
Township of Sullivan	April	30, 1936
Township of Westmeath—Re Hamlet of Beachburg	September	8, 1936
Township of Westmeath—Re Hamlet of Westmeath	September	8, 1936

CORPORATIONS

The Exolon Company Incorporated	August	1, 1935
Firestone Tire and Rubber Company of Canada, Limited	June	15, 1936
His Majesty the King, represented by the Honourable, the Minister of Railways and Canals of Canada	March	10, 1936
The International Nickel Company of Canada, Limited	September	1, 1936
Leitch Gold Mines, Limited	May	29, 1936
Norton Company	September	1, 1936
Sand River Gold Mining Company, Limited	May	21, 1936

RIGHT-OF-WAY AND PROPERTIES

The Commission as trustee for the co-operating municipalities of the several systems, and as trustee for the Provincial Government in Northern Ontario has vested in it, or controls through ownership of subsidiary companies, a large amount of real estate throughout the Province. This real estate comprises power sites, storage basins, land held to avoid consequential damages, right-of-way and lands occupied by generating stations, transformer and distributing stations, and administration buildings. In respect to the 5,600 miles of high-voltage transmission lines, and the 10,000 miles of distribution lines in rural power districts, the Commission's right varies from direct ownership to rights held through easements, and leases for occupation with the right to overhang or tree trim thereon.

The Commission, where vested in the fee, endeavors to obtain from the lands under its jurisdiction the maximum revenue consistent with its own use. Lands which have come into the Commission's possession, and which are not immediately required for its purposes are, where possible, leased until the need arises for their use, and an endeavour is made to dispose of all lands not required.

The acquirement and administration of land owned, leased or controlled involves surveys, investigation of title, registrations, record, assessment and taxes.

In connection with the transmission and distribution networks throughout the Province, it is frequently necessary to obtain the approval of such controlling bodies as the Board of Railway Commissioners for Canada, Ontario Municipal Board, Department of Transport, Department of Public Works, Department of Indian Affairs, Department of Crown Lands, or other corporate body having jurisdiction over the lands involved.

In accordance with the foregoing, a systematic check of land owned by the Commission was undertaken and more than 500 miles of right-of-way and a large number of properties were inspected. A further endeavor to lessen the amount of property carried by the Commission was made and a number of miscellaneous properties were sold.

Maintenance

In the Toronto and Niagara Falls districts all residences and buildings owned by the Commission and available for lease were inspected and necessary rehabilitation and repair work was performed in accordance with an established cycle of maintenance. This resulted in increased revenue.

Where practicable fencing of right-of-way is dispensed with, but to meet special situations it was necessary to renew several miles.

The Year's Operations

During the year, agreements were made covering 403 crossings and leases, 397 easements for transmission line right-of-way, and 101 tree trimming rights upon the lines hereinafter noted. In no instance did the owner have occasion to appeal to the Valuator appointed under The Power Commission Act.

Purchase of Sites

Sites were purchased for Mannheim and Ryckman distributing stations, and an extension to Thorold transformer station in the Niagara system: also for Sudbury distributing station in the Sudbury District of the Northern Ontario Properties. Negotiations were practically completed for the purchase of transformer station and switching station sites at Kirkland Lake and for an extension to transformer station at Timmins in the Abitibi District.

Right-of-Way—Purchase and Sales

An important property on the former Toronto and Niagara Power Company's line in Toronto was acquired. This completed a continuous right-of-way from the city limits to Bridgman-Davenport transformer station.

The resale to adjoining property owners, of Toronto Suburban Railway properties acquired from the Canadian National Railways, was continued, subject to the right of the Commission to maintain transmission lines thereon. A portion extending from Islington to Cooksville was sold to the Department of Highways for the widening of Dundas street.

A number of sales of property formerly controlled by the Metropolitan Division of the former Toronto and York Radial Railway were made and deeds completed.

The resale of the former Grand Trunk Railway right-of-way, extending from Port Hope to Oshawa, and the Toronto Eastern Railway right-of-way from Bowmanville to Oshawa, was authorized, subject to the right to maintain thereon transmission lines.

Progress was made in acquiring and completing easements and rights in connection with transmission lines already constructed in Northern Ontario.

Settlement was effected in a number of damage claims resulting from the present maintained water level of Chats Lake.

A survey of property affected and an estimate of consequential land damage involved was completed in connection with the proposed Madawaska storage in Aylen, Bark and Kaminiskeg lakes, in the counties of Hastings and Renfrew and District of Nipissing.

Surveys

A number of field surveys were made amongst which were the following:

(a) Eugenia storage basin.

(b) Toronto entrance, Humber river to Exhibition grounds.

(c) St. Lawrence river transmission line crossing to Tar island.

(d) Mannheim station site.

(e) Hamilton east entrance, Kenilworth avenue to Stirton street.

(f) City of Hamilton, properties of Dominion Power and Transmission Company.

(g) Big Chute, Severn river to Honey Harbour transmission line.
(h) Trent canal crossing, Campbellford.
(i) Rideau canal crossing, Brass' Point.
(j) Sudbury distributing station site.
(k) Toronto and Niagara Power Company right-of-way - 3.
(l) Niagara lands general - 3.
(m) St. Catharines, Hamilton Cataract Power, Light and Traction Company's lands, Twelve Mile creek - 2.

In order to establish boundaries of lands owned by the Commission, the survey and placement of concrete monuments bearing bronze plugs was initiated. A number of important locations requiring attention were first selected, amongst them the following: Toronto entrance right-of-way from Humber river to Dowling avenue; and Eugenia storage basin boundaries.

Taxes

A check of all lands owned by the Commission which are subject to taxation under The Power Commission Act was completed, and by appeal or discussion with the municipalities affected, many inequalities and adjustments were made.

Lines in Rural Power Districts

Where possible, rural power lines are constructed on public highways or roads. In a few cases in order to avoid cutting trees, or owing to special local conditions, lines have been placed on private property. Frequently highway construction and improvement make it necessary to relocate existing pole lines. Wood-pole lines and extensions, involving easements, leases, etc., were constructed in the following rural power districts during 1935:

Niagara System

Amherstburg, Aylmer, Ayr, Baden, Beamsville, Belle River, Bond Lake, Bothwell, Brant, Caledonia, Chatham, Chippawa, Dorchester, Dresden, Dundas, Dunnville, Dutton, Elora, Essex, Georgetown, Grantham, Guelph, Haldimand, Ingersoll, Lynden, Merlin, Milton, Niagara, Preston, Ridgetown, St. Marys, St. Thomas, Sarnia, Strathroy, Thamesville, Tilbury, Walsingham, Wallaceburg, Waterdown, Waterford, Welland, Woodbridge, Woodstock.

Georgian Bay System

Bala, Barrie, Baysville, Beaumaris, Beaverton, Cannington, Creemore, Dundalk, Gravenhurst, Hawkestone, Huntsville, Medonte, Minden, Midland, Owen Sound, Uxbridge, Utterson.

Eastern Ontario System

Alexandria, Belleville, Bowmanville, Brighton, Brockville, Chesterville, Coburg, Colborne, Fenelon Falls, Iroquois, Kingston, Martintown, Maxville, Millbrook, Marmora, Napanee, Nepean, Newcastle, Norwood, Oshawa, Peterborough, Renfrew, Smiths Falls, Wellington.

High- and Low-Voltage Transmission Lines

Right-of-way easements, leases, tree trimming and crossing rights were negotiated in connection with the following lines:

Niagara System

De Cew Falls generating station to Niagara Falls (Canadian Niagara Power), D.P. 1x4.
DeCew Falls generating station to Bartonville switching station, D.P. 1x70.
Burlington distributing station to National Fireproofing junction, D.P. 13x1362.
Bartonville switching station to Ancaster distributing station, D.P. 70x24.
Firestone junction to Irondale station, D.P. 72x22.
Niagara transformer station to Toronto Power transformer station, N. 1x12.
Dundas transformer station to Guelph transformer station, N. 2x5.
Dundas transformer station to Brant transformer station, N. 2x12.
Dundas transformer station to Nelson junction, N. 2x52.
Dundas transformer station to Hamilton, N. 2x201.
Guelph transformer station to Preston transformer station, N. 5x6.
Preston transformer station to Kitchener transformer station, N. 6x7.
Kitchener transformer station to Erbs junction, N. 7x86.
Kitchener transformer station to Waterloo, N. 7x702.
St. Marys transformer station to London transformer station, N. 9x4.
St. Thomas transformer station to Kent transformer station, N. 11x11.
St. Thomas transformer station to St. Clair transformer station, N. 11x18
St. Thomas transformer station to Aylmer junction, N. 11x1168.
Brant transformer station to Brantford, N. 12x1201.
Essex transformer station to Windsor, N. 15x1501.
Essex transformer station to Essex distributing station, N. 15x1547.
York transformer station to Islington distributing station, N. 16x1646.
Hamilton Beach transformer station to Hamilton Stirton transformer station, N. 17x18.
Bridgman Davenport transformer station to Leaside transformer station, N. 31x34.
Bridgman Davenport transformer station to Elmsthorpe junction, N. 31x372.
Port Colborne transformer station to International Nickel Company, N. 43x1306.
Thorold transformer station to Merritton switching station, N. 44x1183.
Allanburg junction to Dundas transformer station, N. 54x2.
Allanburg junction to St. Thomas transformer station, N. 54x11.
Fonthill junction to Pelham junction, N. 56x55.
Burlington junction to Islington junction, N. 59x66.
Halton junction to Cooksville transformer station, N. 60x13.
Islington junction to Wiltshire junction, N. 66x82.
Union Carbide junction to Welland transformer station, N. 80x15.
Gibson junction to Thorold transformer station, N. 84x44.
Erbs junction to Stratford transfromer station, N. 86x8.
Canadian Niagara Power Company to Niagara transformer station, N. 94x1.
Canadian Niagara Power Company to Toronto Power transformer station, N. 94x12.
Wabash junction to Thorold transformer station, N. 95x44.
Dundas to Lynden distributing station, N. 202x34.
Richmond Hill distributing station to Aurora distributing station, N. 343x41.
Sharon distributing station to Keswick junction, N. 360x79.
Don junction to Danforth junction, N. 368x63.
Keswick junction to Sutton distributing station, N. 379x50.
Glendale junction to Delaware junction, N. 465x62.
Georgetown distributing station to Provincial Paper junction, N. 539x70.
Rockwood junction to Acton distributing station, N. 566x37.
Provincial Paper junction to Provincial Paper distributing station, N. 570x40.
Mannheim junction to Mannheim distributing station, N. 771x41.
Clinton junction to Clinton, N. 866x6.
Clinton junction to Goderich rural station, N. 866x49.
Harriston junction to Harriston distributing station, N. 871x11.
Norwich junction to Tillsonburg, N. 1066x9.
Aylmer junction to Aylmer distributing station, N. 1168x38.
Streetsville junction to Milton, N. 1369x8.
Meadowvale junction to Provincial Paper Company junction, N. 1380x570.
Dixie junction to Meadowvale junction, N.1381x80.
Ridgetown junction to Thamesville junction, N. 1465x67.
Prince Albert junction to Como junction, N. 1468x69.
Como junction to Dominion Sugar Company junction, N.1469x83.
Sandwich junction to Sandwich distributing station, N. 1569x39.
Gosfield junction to Leamington distributing station, N. 1576x45.

Islington distributing station to Weston junction, N. 1646x63.
Humber junction to Weston, N. 1660x3.
Weston junction to Humber junction, N. 1663x60.
Albion Park junction to Albion Park distributing station, N. 1677x47.
Forest distributing station to Arkona junction, N. 1845x71.
Oil Springs junction to Petrolia distributing station, N. 1862x43.
Murphy Road junction to Perth junction, N. 1872x77.
Wanstead junction to Forest distributing station, N. 1876x45.
Wanstead junction to Watford distributing station, N. 1876x46.
Bourgoyne switching station to Louth distributing station, N. 4455x54.
Merritton switching station to Bourgoyne switching station, N. 4483x55.
Garden City junction to Garden City Pulp and Paper Company, N. 4486x26.
Federal junction to Chats Falls junction, N.A. 59x2.
Federal junction to Ottawa switching station, N.A. 59x9.
Interprovincial Boundary to Cumberland junction, N.A. 93x55

Georgian Bay System

South Falls generating station to Gravenhurst junction, G. 4x54.
Ragged Rapids to Bala junction, G. 9x63.
Erbs junction to Hanover frequency changer station, G. 86x36.
Eugenia generating station to Markdale junction, E. 1x52.
Eugenia generating station to Dundalk junction, E. 1x55.
Eugenia generating station to Meaford junction, E. 1x64.
Chatsworth distributing station to Kilsyth junction, E. 3x65.
Teeswater distributing station to Wingham distributing station, E. 21x22.
Dundalk junction to Dundalk distributing station, E. 55x5.
Walkerton junction to Teeswater junction, E. 70x71.
Teeswater junction to Teeswater distributing station, E. 71x21.
Teeswater junction to Holyrood junction, E. 71x74.
Holyrood junction to Holyrood distributing station, E. 74x24.
Holyrood junction to Kincardine distributing station, E. 74x25.
Derby Mills junction to Hepworth distributing station, E. 84x47.
Hanover switching station to Walkerton junction, E. 86x70.
Port Elgin junction to Port Elgin distributing station, E. 94x44.
Stayner junction to Stayner distributing station, S. 60x10.
Thornton junction to Bradford junction, S. 86x87.

Eastern Ontario System

Cornwall transformer station to Howard Smith transformer station, Q. 6x7.
Carleton Place distributing station to Carleton Place junction, Q. 9x55.
Boundary junction to Ottawa junction, Q. 50x51.
Ottawa junction to Cornwall transformer station, Q. 51x6.
Carleton Place junction to Smiths Falls junction, Q. 55x63.
Pakenham junction to Carleton Place distributing station, Q. 61x9.
Smiths Falls junction to Smiths Falls transformer station, Q. 63x2.
Sydney Terminal Station to Trenton Air Station, C. 3x303.
Seymour generating station to Deloro switching station, C. 11x82.
Fenelon Falls generating station to Lindsay distributing station, C. 30x29.
Welcome junction to Oshawa Boulevard junction, C. 65x78.
Napanee rural station to Bath, C. 70x7001.
Norwood switching station to Auburn switching station, C. 81x69.
Cataraqui rural station to Kingston switching station, C. 93x94.
Consecon junction to Wellington distributing station, C. 97x45.
Smiths Falls distributing station to Rideau junction, H. 3x53.
Merrickville generating station to Grenville Crushed Rock distributing station, H. 7x10.
Forfar distributing station to Westport, H. 12x1201.
Carleton Place junction to Smiths Falls distributing station, H. 55x3.
Cornwall transformer station to Howard Smith Paper Mills distributing station, L. 1x6.
Cornwall transformer station to Winchester junction, L. 1x54.
Williamsburg distributing station to Winchester distributing station, L. 7x4.
Lyn distributing station to Athens, L. 19x1901.
Cardinal distriubting station to Lower Lakes Terminal junction, L. 23x74.
Winchester junction to Williamsburg distributing station, L. 54x7.
Winchester junction to Cardinal distributing station, L. 54x23.
Dominionville junction to Maxville distributing station, L. 67x17.
Phillips junction to Brockville distributing station, L. 72x3.

Lower Lakes Terminal junction to Prescottt distributing station, L. 71x2.
Calabogie generating station to Ashdod junction, Q.M. 13x78.
Galetta junction to Chats Falls junction, Q.M. 60x71.
Burnstown junction to Arnprior junction, Q.M. 62x67.

Thunder Bay System

Dorion junction to Port Arthur transformer station, P. 55x2.

Northern Ontario Properties

Sudbury District

Coniston generating station to Neelon junction, F.S. 1x51.
Neelon junction to Sudbury distributing station, F.S. 51x5.
Neelon junction to Capreol junction, F.S. 51x56.

Abitibi District

Abitibi Canyon generating station to Hunta switching station, F.A. 12x50.
Kirkland Lake transformer station to Kirkland Gold Rand Mines, Limited, F.A. 16x1605
Ramore transformer station to Kirkland Lake switching station, F.A. 18x66.
Ramore transformer station to Hollinger Consolidated Gold Mines (Hislop township), F.A. 18x1801.
Ramore transformer station to Vimy Gold Mines, F.A. 18x1802.
Ramore transformer station to Ramore distributing station, F.A. 18x1833.
Timmins transformer station to Blezard Valley junction, F.A. 19x70.
Timmins transformer station to Paymaster Consolidated Mines Limited, F.A. 19x1903
Timmins transformer station to Goldale junction, F.A. 19x1961.
Hunta switching station to Timmins transformer station, F.A. 50x19.
Iroquois Falls switching station to Ramore transformer station, F.A. 65x18.
Kirkland Lake switching station to Kirkland Lake transformer station, F.A. 66x16.
Kirkland Lake switching station to Matachewan transformer station, F.A. 66x17
Kirkland Lake switching station to Larder Lake transformer station, F.A. 66x21.
Blezard Valley junction to Copper Cliff transformer station, F.A. 70x10.
Blezard Valley junction to Falconbridge transformer station, F.A. 70x20.
Ramore distributing station to Ramore, F.A. 1833x3.
Ramore distributing station to Matheson, F.A. 1833x1.
Paymaster Consolidated Mines to Preston East Dome Mines, F.A. 1903x4.
Goldale junction to Porcupine Lake junction, F.A. 1961x65.
Porcupine Lake junction to Porcupine Lake Gold Mining Company, F.A. 1965x5.

Espanola District

Abitibi Power and Paper Company generating station to McMillan Gold Mines, F.E. 1x2.

SECTION II

OPERATION OF THE SYSTEMS

Operating Conditions

Satisfactory operation was maintained on all systems, with no serious interruptions to service, except in the Sudbury district. A fire at Stinson generating station on September 10 caused extensive damage and the plant was out of service until repairs could be made. Unit No. 2 was returned to service October 15 and unit No. 1 on October 31. From September 10 until September 20, when arrangements were completed for delivering a temporary supply from the Abitibi Power and Paper Company, it was necessary to restrict the supply of power to certain customers in the district.

An unusually hot dry summer reduced the stream flow in the Trent river, seriously reducing the capacity of the generating stations in the Trent valley. By the use of the frequency-changer set at Chats Falls and one of the lines normally used to transfer power at 220,000 volts from Chats Falls to Leaside, it was possible to supply sufficient power from Chats Falls to the Eastern Ontario system to make up the deficiency in the power supply, and there were no restrictions on primary load. Some reductions were made in the supply of secondary power. On the Georgian Bay system the drought also affected the capacity of the generating plants and it was necessary to transfer more power from the Niagara system through the Hanover frequency-changer set than required in the previous year. Normal conditions prevailed on other systems.

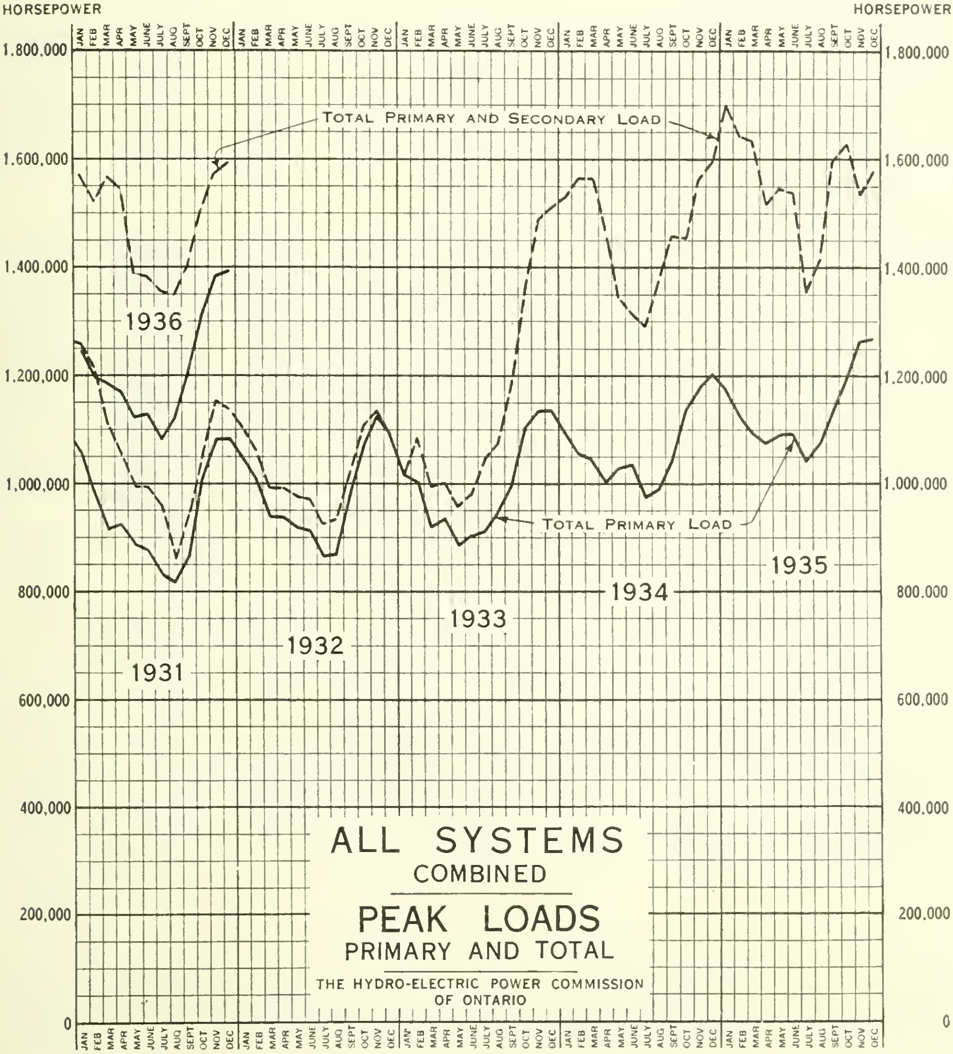
Load Conditions

The total load on all systems, including both generated and purchased power, amounted to 6,996,578,453 kilowatt-hours, and is the largest load ever carried on the combined systems during any fiscal year. It is about 77,600,000 kilowatt-hours in excess of last year's load, which was the maximum up to that time. The yearly peak (i.e., the sum of the peak loads of all systems) was 1,618,113 horsepower. This is a decrease from the previous year of 6.4 per cent, due to a reduction in the amount of secondary power sold.

The primary load on all systems, which has the greatest significance in relation to revenue and general industrial conditions, amounted to 5,395,304,303 kilowatt-hours, an increase of about 423,000,000 kilowatt-hours, or 8.5 per cent over the previous fiscal year. The peak load (i.e., the sum of all system primary peak loads) was 1,317,643 horsepower, an increase of 93,000 horsepower or 7.6 per cent over the previous year. Both peak and energy exceeded the highest primary load ever previously carried.

While the increase in the primary load was gratifying as an indication of improved industrial conditions, the gain was not uniform on all systems. The greatest gains were made in the Abitibi district, and in the Thunder Bay and Eastern Ontario systems. The average primary load on the Abitibi district increased approximately 60 per cent and on the Thunder Bay system approximately 14 per cent. The Eastern Ontario system showed a gain of almost 12 per cent. These gains in primary load are large, exceeding the average of normal years.

On the Niagara system the records of power generated and purchased show an increase in the primary peak load of 35,000 horsepower and in



TOTAL POWER GENERATED

HYDRO-ELECTRIC GENERATING PLANTS

Generating plants	Maximum normal plant capacity Oct. 31, 1936 horsepower	Peak load during fiscal year		Total output during fiscal year	
		1934-35 horse-power	1935-36 horse-power	1934-35 kilowatt-hours	1935-36 kilowatt-hours
Niagara system					
Queenston-Chippawa—Niagara river	500,000	461,126	520,107	1,974,047,000	2,636,296,000
"Ontario Power"—Niagara river	180,000	174,933	176,273	758,356,000	798,141,000
"Toronto Power"—Niagara river	150,000	136,729	145,442	101,713,000	239,906,000
Chats Falls (Ontario half)—Ottawa river	115,000	96,515	116,622	298,333,450	391,033,500
DeCew Falls—Welland canal	50,000	45,845	45,845	118,476,000	118,363,500
Steam Plant—Hamilton	24,000	....	....	—3,071,700	—3,429,600
Georgian Bay system					
South Falls—South Muskoka river	5,600	5,630	5,764	25,496,160	24,818,640
Hanna Chute—South Muskoka river	1,600	1,609	1,743	7,250,400	7,708,800
Trethewey Falls—South Muskoka river	2,300	2,145	2,145	9,756,000	10,915,200
Bala No. 1 and 2—Muskoka river	600	597	597	2,340,760	2,456,776
Big Chute—Severn river	5,800	5,737	5,657	21,468,960	18,686,400
Wasdells Falls—Severn river	1,200	1,099	1,206	3,684,900	3,338,420
Eugenia Falls—Beaver river	7,800	7,399	7,641	9,640,800	13,133,800
Hanover—Saugeen river	400	429	435	804,960	548,304
Walkerton—Saugeen river	500	476	489	1,862,200	1,955,200
Southampton—Saugeen river	300	0	0	0	0
Eastern Ontario system					
Sidney—Dam No. 2—Trent river	4,500	4,960	4,960	19,919,100	19,205,100
Frankford—Dam No. 5—Trent river	3,500	3,780	3,820	11,252,150	15,724,850
Meyersburg—Dam No. 8—Trent river	7,000	7,936	8,043	31,736,760	34,628,590
Hague's Reach—Dam No. 9—Trent river	4,500	4,893	4,960	20,008,740	20,543,260
Ranney Falls—Dam No. 10—Trent river	10,500	11,260	11,528	45,255,960	49,349,880
Seymour—Dam No. 11—Trent river	4,200	4,424	4,558	17,916,720	17,628,480
Heely Falls—Dam No. 14—Trent river	15,300	16,220	16,086	49,968,200	55,215,580
Auburn—Dam No. 18—Otonabee river	2,400	2,587	2,547	11,100,090	10,792,840
Fenelon Falls—Dam 30—Sturgeon river	1,000	938	1,046	1,845,800	2,598,850
High Falls—Mississippi river	3,000	3,318	3,251	6,359,520	10,910,520
Carleton Place—Mississippi river	400	469	536	80,208	336,488
Calabogie—Madawaska river	5,400	5,362	5,496	5,835,829	18,659,370
Galetta—Mississippi river	1,100	965	1,193	102,900	736,054
Thunder Bay system					
Cameron Falls—Nipigon river	73,500	73,994	75,067	300,348,000	348,615,000
Alexander—Nipigon river	50,000	52,547	52,413	239,030,400	258,036,000
Northern Ontario properties					
Nipissing district					
Nipissing—South river	2,100	2,205	2,198	5,550,880	6,770,000
Bingham Chute—South river	1,200	1,314	1,330	3,286,400	3,597,440
Elliott Chute—South river	1,700	1,903	1,964	3,826,400	3,036,400
Sudbury district					
Coniston—Wanapitei river	5,900	5,496	5,764	22,570,176	25,800,864
McVittie—Wanapitei river	3,100	2,815	3,217	16,508,784	14,074,752
Stinson—Wanapitei river	7,500	6,836	7,239	20,645,448	21,686,304
Patricia district					
Ear Falls—English river	4,000	3,512	4,182	16,032,000	19,060,600
Abitibi district					
Abitibi Canyon—Abitibi river	165,000	103,485	146,783	378,646,450	604,215,880
St. Joseph district					
Rat Rapids—Albany river	3,000	1,314	1,702	3,085,560	7,287,720
Total generated	1,424,900	*	*	4,561,071,365	5,832,382,762

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*Because the peak loads on the various generating plants and purchased power sources usually occur at different times, the sum of the individual peak loads would not represent the sum of the peak loads on the systems. These, in the case of each system, must relate to the maximum load occurring at any one time. Consequently, the column headed "Peak load" is not totalled.

AND PURCHASED—ALL SYSTEMS

POWER PURCHASED

Power source	Contract amount horsepower Oct. 31, 1936	Total purchased	
		1934-35 kilowatt-hours	1935-36 kilowatt-hours
Canadian Niagara Power Co	20,000	77,834,300	108,304,000
Gatineau Power Co.—25-cycle	100,000	1,183,389,342	644,862,800
Ottawa Valley Power Co.	....	298,333,450	0
Beauharnois Light, Heat & Power Co.	....	409,220,000	0
MacLaren Quebec Power Co	40,000	128,657,000	146,177,000
Campbellford Water & Light Commission*	....	0	562,300
Fenelon Falls Light, Heat & Power Commission†	....	0	9,600
M. F. Beach Estate	500	1,049,200	1,338,800
Rideau Power Co	487	2,760,700	2,903,000
Ottawa & Hull Power & Mfg. Co	20,000	63,033,400	62,256,600
Gatineau Power Co.—60-cycle	42,000	190,684,458	189,310,000
Orillia Water, Light & Power Commission*	....	0	2,427,970
Manitoulin Pulp Co	150	222,300	280,200
Abitibi Power & Paper Co.—Espanola	....	2,711,580	3,141,781‡
Kaministiquia Power Co	....	0	2,621,640¶
Total purchased	223,137	2,357,895,730	1,164,195,691

Power purchased, contract amount, 1936	223,137	horsepower
Maximum normal plant capacity, 1936	1,424,900	“
Total available capacity generated and purchased, 1936	1,648,037	“
Total available capacity generated and purchased, 1935	1,957,684	“
Difference(decrease)	309,647	“
Total energy purchased, 1936	1,164,195,691	kilowatt-hours
Total energy generated, 1936	5,832,382,762	“ “
Total energy generated and purchased, 1936	6,996,578,453	“ “
Total energy generated and purchased, 1935	6,918,967,095	“ “
Difference (increase)	77,611,358	“ “

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*Reciprocal arrangement for surplus power.

†Emergency use.

‡Includes 2,215,975 kilowatt-hours in 1936 for emergency use in the Sudbury district.

¶Purchased on kilowatt-hour basis.

CAUTION: The figures for "Maximum normal plant capacity" reflect the capacity of the various plants under the most favourable operating conditions which can reasonably be considered as normal, taking into consideration turbine capacity as well as generator capacity, and also the net operating head and available water supply.

Owing, among other things, to changes in generating equipment due to wear and tear or the replacement of parts, also to changes in limitations governing water levels and effective net heads, the maximum normal plant capacity is not a fixed quantity but is one which must be revised from time to time.

It is particularly important to bear in mind that the column headed "Maximum normal plant capacity" cannot be taken as an indication of the dependable capacity of the various plants: in some cases, it is, but in many cases it is not. Chief among the factors which govern the maximum dependable capacity of a hydraulic power plant and which are not reflected in column headed "Maximum normal plant capacity" are abnormal variations in water supply and operating limitations encountered when plants are so situated on a given stream as to be affected by one another.

primary energy of more than 203,000,000 kilowatt-hours. These figures relate to the primary load, but if they are to be used as an indication of revenue or of industrial conditions in the territory, allowance should be made for certain changes in transmission losses which occurred at the end of 1935. Transmission losses are included in the records of power generated and purchased, and therefore any changes in the losses affect the totals. For example, a decrease in transmission losses might partly offset an actual increase in power consumption at points of delivery, causing less increase in the load at the generating stations than would have occurred had the losses remained at their previous level. This condition existed on the Niagara system in 1936. The reduction, in October, 1935, in the amount of power purchased from the Quebec power companies resulted in a marked decrease in transmission losses during 1936 as compared with 1935. Due to a number of variables, it is difficult to give an accurate figure as to the amount of these losses. Based on conservative estimates, the true increase in the primary power consumption on the Niagara system for the fiscal year 1936 may be taken as approximating 60,000 horsepower. The increase in consumption appears to have been fairly general in all parts of the system, as indicated by the loads of the various municipalities. However, even after making allowances for the reduced transmission losses in 1936, the rate of gain for the primary load on the Niagara system is not yet equal to the gains established as normal over a long period of years prior to the depression.

On the Georgian Bay system the average primary load showed a gain of 6 per cent, which approximates the gain in normal years. The increase in peak load amounted to 2.6 per cent. Both peak load and average load are the highest ever carried on the system.

Details regarding the amount of power generated and purchased and the loads of each system are given in the following sections of this report and in the load graphs shown in connection with each system.

Forestry Division

The Forestry division continued regular transmission line clearing operations to protect the Commission's lines and service from tree interference. Some work was done on generating and transformer station grounds, trees and shrubs being planted and existing trees pruned and, where necessary, tree surgery performed. Reforestation was carried out on non-revenue producing lands in the Niagara, Georgian Bay and Eastern Ontario systems.

In addition to the above the Forestry division was employed by an increasing number of municipal Hydro systems to perform line-clearing operations for the protection of local distribution lines. It is gratifying to note a growing appreciation of the work performed by the Commission's Forestry staff as indicated by the number of municipal Hydro systems authorizing repeat operations.

A further description of the work with details pertaining to the cost will be found in the following paragraphs.

Transmission Line Clearing Operations

This year's operations involved treatment of 53,181 trees and 384 pole spans of underbrush, spread over approximately 2,024 miles of power transmission and telephone line. The cost, including all expenditures for labor, material, truck expense and Forestry overhead applicable to this work is shown in the following table:

LINE CLEARING OPERATIONS

Description of work	Miles of line cleared	Volume of work performed	Total cost	Average cost
			$	$ c.
Underbrushing	10	384 pole spans	2,653	6.90 per span
Tree removals	....	4,127 trees	10,317	2.50 per tree
Line clearance, pruning and cabling	2,013	49,054 trees	48,409	0.98 " "

A SPECIMEN BEECH TREE

Many such trees, unmolested by human hands, add to the scenic beauty of Ontario

The work performed includes pruning to secure the required clearance, a reasonable amount of shaping to improve the appearance of trees and aesthetic conditions along the roads and highways, cabling trees with structurally weak or splitting crotches, and a systematic diagnosis of all trees along the lines to discover and remove those that were diseased and a menace to life, service and property.

A comparison of this year's report with that of last year shows a reduction in the number of miles of line cleared and the number of trees treated, and an increase in the average cost per tree. This is partly due to a reduction in working time, resulting from the adoption of a 48-hour week in place of a 55-hour week, and the granting of statutory holidays and two weeks vacation to all regular employees. Part of the increase is due to the exceptional amount of work required to provide adequate clearance for lines in the Dominion Power and Transmission district, where line clearing had not been undertaken previously.

In addition to the regular line-clearing work, the Forestry squad operating in the Eastern Ontario system was called out on three different occasions to assist in emergencies and repair important lines damaged by sleet and wind storms.

Rural Lines

Preparatory to undertaking tree-trimming operations along rural lines situated on or near the King's highways, the Forestry division made a complete survey of the trees affecting rural lines, taking an actual count and record of their condition. The survey showed a total of 97,000 trees spread over approximately 1,577 miles of rural line, an average density of 61 trees per mile. About 76,000 of these trees present a potential hazard to rural service at the present time. The remaining 21,000 trees were planted during recent years and are still small.

Reforestation

Reforestation operations undertaken involved the planting of approximately 140,000 coniferous and deciduous trees on vacant lands owned by the Commission. Pheasant island in the Eugenia reservoir on the Georgian Bay system constituted one area, Chippawa-Queenston canal on the Niagara system another area, and the third area was in the vicinity of Sidney generating station at Trenton on the Eastern Ontario system.

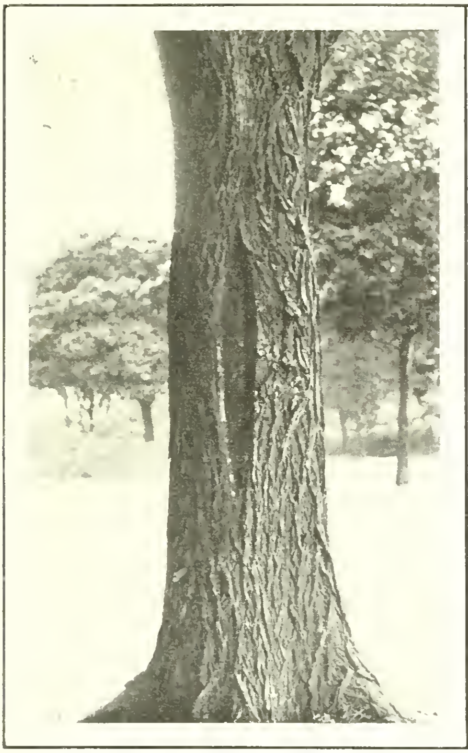
Work for Municipal Hydro Systems

Surveys of trees affecting local distribution lines owned by municipal Hydro systems were made in 16 municipalities.

Line clearing operations were performed for Agincourt, Aurora, Baden, Brampton, Burlington, Hamilton, Hensall, St. Jacobs, Wellesley and Woodstock on the Niagara system; for Markdale on the Georgian Bay system and for Lanark, Peterborough and Westport on the Eastern Ontario system. The operation for Woodstock included the training of two linemen and two employees of the local Parks department, and one lineman was trained during the Brampton operation. This work involved treatment of 3,235 trees spread over approximately 44 miles of distribution line. The cost amounted to $3,364, an average cost of approximately $1.04 per tree. Details pertaining to expenditures and work done on each of the three systems are shown on the following tabulation:

FORESTRY WORK FOR HYDRO MUNICIPALITIES

System	Number of municipalities	Number of men trained	Number of trees				Total cost	Average cost per tree
			Cabled	Removed	Pruned	Total		
							$ c.	$ c.
Niagara	10	5	37	29	1,887	1,916	2,250.85	1.12
Georgian Bay	1	....	12	2	408	410	359.65	0.88
Eastern Ontario	3	....	6	13	896	909	753.76	0.83
Totals	14	5	55	44	3,191	3,235	3,364.26	1.04



PRESERVATION OF TREES BY SURGERY

Surgery preserves a stately elm on the grounds of one of the Commission's important stations. Observe the perfect healing callous

DESTRUCTION OF TREES CAUSED BY NEGLECT

Treatment in early life often prevents decay or defects which would make certain trees a menace to public utilities service and to the lives of travelling citizens

NIAGARA SYSTEM

Generating Stations—Queenston Station

All equipment was available when required for service throughout the year. The station output, however, was curtailed from January 24 to March 1, by amounts up to 70,000 horsepower, resulting from high water in the lower river caused by a severe ice jam extending from lake Ontario to the Niagara glen, a distance of about eight miles.

All generators and turbines were removed from service during the summer months for inspection and necessary maintenance as noted below:

Number 1 unit from May 14 to May 20,
" 2 " " May 4 to May 11,
" 3 " " September 8 to September 22,
" 4 " " May 26 to June 5,
" 5 " " June 14 to June 23,
" 6 " " June 25 to July 6,
" 7 " " June 8 to July 7,
" 8 " " August 4 to August 17,
" 9 " " July 20 to July 30.

Number 7 unit was completely dismantled to make necessary repairs to the turbine runner vanes which were damaged by debris carried into the unit with heavy ice. The equipment of all other units, including governors, draft tubes, Johnson valves, bearings, turbines, exciters and generators, were carefully inspected and repairs made where necessary. All generator windings were cleaned and varnished, and the turbine runners of units number 3, 4 and 8 were repaired by welding in situ.

Along with the foregoing work on the main units, all auxiliary equipment including transformers, reactors, oil circuit-breakers, disconnecting switches, busses, meters, relays, wiring and piping were carefully inspected and repairs or replacements made where necessary.

Minor repairs were made to the two station service units during the summer months.

A new direct-connected motor-driven gear-type oil pump was installed in the main oil supply system. Number one 220-volt control battery, placed in service in December, 1921, was replaced with a new 110-cell unit. New stands were made to store the steel tail-race gates at a higher elevation, in order to place them above the high water level reached during the ice blockade in the lower river this year.

An atomic hydrogen welding outfit was purchased and installed for repairs to bronze turbine runners from the Ontario Power and Toronto Power plants, all major welding work for the district being carried out at Queenston station.

A number of the concrete slabs over the tail-race gate openings, which were destroyed in the ice jam, were replaced. Plastered surfaces in the control room, control room offices and offices at the entrance building were repaired, and the rooms redecorated; the breaker and disconnect compartments, the tanks of the 110,000-volt potential transformers on the roof, and parts of the screen house and lower elevations of the power house were painted.

Ontario Power Station

The equipment operated satisfactorily during the year, although there were several failures of generator armature windings which did not cause any interruption to service.

All generators and turbines were removed from service during the summer months for inspection and necessary maintenance, as noted below:

Number 1 unit from June 7 to June 11,
“ 2 “ “ May 18 to May 22,
“ 3 “ “ June 2 to June 7,
“ 4 “ “ July 3 to July 10,
“ 5 “ “ May 30 to June 2,
“ 6 “ “ May 26 to May 30,
“ 7 “ “ July 13 to July 20,
“ 8 “ “ July 21 to July 24,
“ 9 “ “ July 26 to July 30,
“ 10 “ “ August 25 to August 29,
“ 11 “ “ August 16 to August 20,

Number 12 unit from August 21 to August 25,
" 13 " " July 30 to August 10,
" 14 " " August 10 to August 15,
" 15 " " August 30 to September 4.

During the above periods all machines were carefully inspected, generator windings were cleaned and varnished, and armature coils were tightened in units 8, 9 and 12. Eroded sections of turbines and draft tubes were built up by electric welding, gates and bushings were adjusted and bearings inspected; all associated equipment, including oil circuit-breakers, cables, meters and relays, was examined and repaired where necessary.

The cleaning of the vertical sections of the penstocks and application of a rust preventative was continued during the year. This work is about forty per cent complete.

The enlarging of the ice spillway on the outer forebay was completed on February 4. This change greatly reduced the accumulation of ice in the intake works during the past winter. The ice chute on the inner forebay was extended to the limit of the screen-house building. These changes will materially reduce the hazard of an ice blockade of the water conduits causing load reductions, and will eliminate the heavy blasting which was formerly required during heavy ice runs.

In order to facilitate delivery of power to the 110,000-volt Niagara system, reduce the hazard of equipment failures, and keep down maintenance costs on some of the older apparatus in the Ontario Power transformer station, cables from the generators have been permanently connected to circuits feeding direct to the bus in the Niagara transformer station. This work was in progress at the end of the year.

As a result of the transfer of all Welland load to the 46,000-volt system, the supply of 30,000-volt power from the Ontario Power transformer station to the Niagara district was discontinued on December 22, 1935. The transformers formerly used to feed this load were reconnected for 60,000-volt service.

A new storage battery, replacing an old unit, was installed during the year. This battery is for emergency operation of the control bus in the generating and transformer stations.

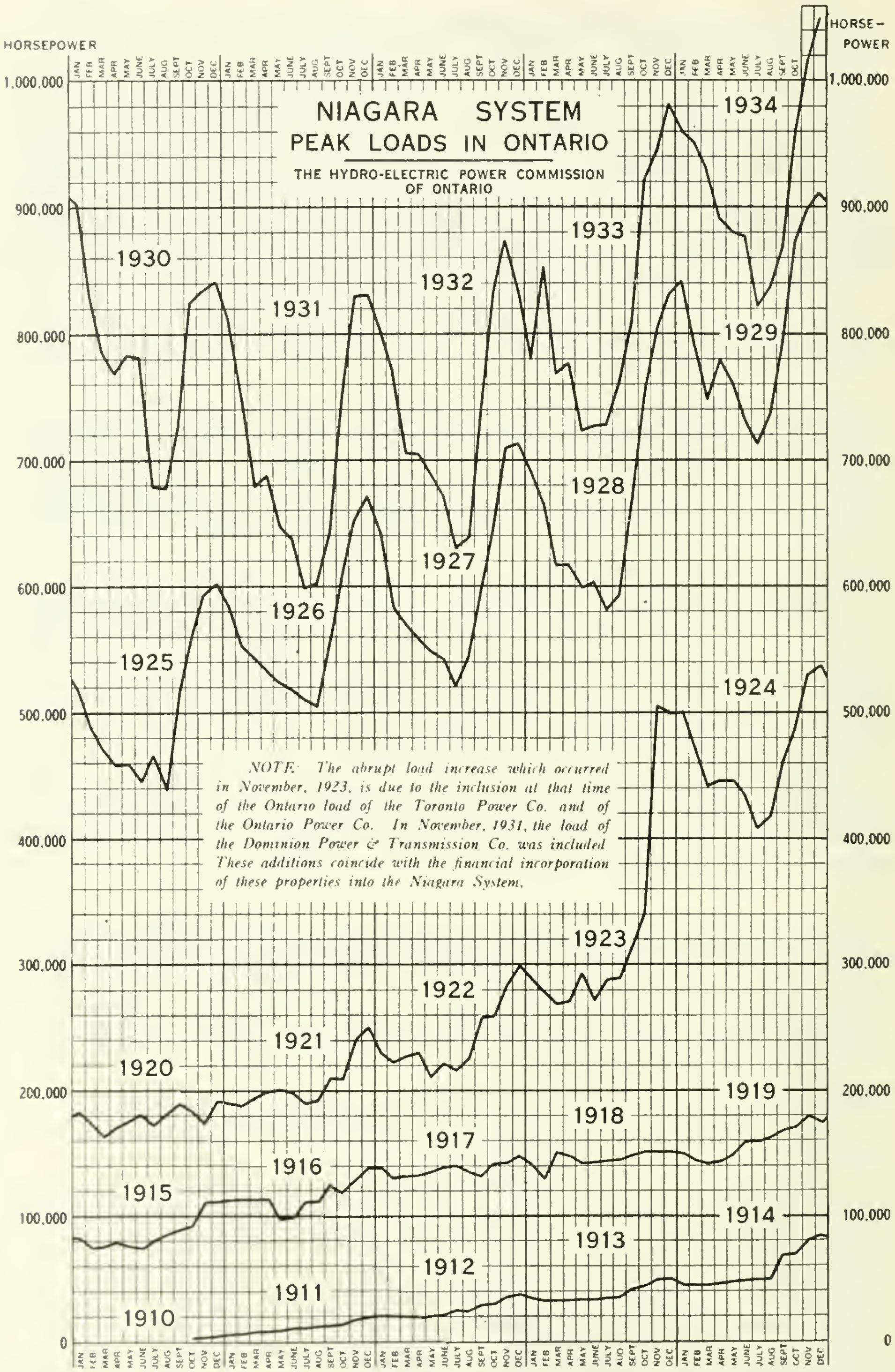
All necessary maintenance was carried out on buildings, roads, station grounds and service equipment.

Toronto Power Station

The station was available for all power demands made on it during the year.

The regular schedule of inspection and repair was followed during the summer months. Units number 9 and 10 were completely dismantled and given a complete overhaul, runners and distributors were built up by electric welding where erosion had occurred, bearings were relined and refitted and generator windings were cleaned and varnished. This was the first complete overhaul made on number 9 unit since it was installed in 1907.

The windings on generators 2, 3, 4, 5 and 11 were cleaned and varnished. New lignum vitae bearings were installed on all lower turbine bearings



NIAGARA SYSTEM
PEAK LOADS IN ONTARIO
THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

NOTE: The abrupt load increase which occurred in November, 1923, is due to the inclusion at that time of the Ontario load of the Toronto Power Co. and of the Ontario Power Co. In November, 1931, the load of the Dominion Power & Transmission Co. was included. These additions coincide with the financial incorporation of these properties into the Niagara System.

HORSEPOWER
HORSE-POWER
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
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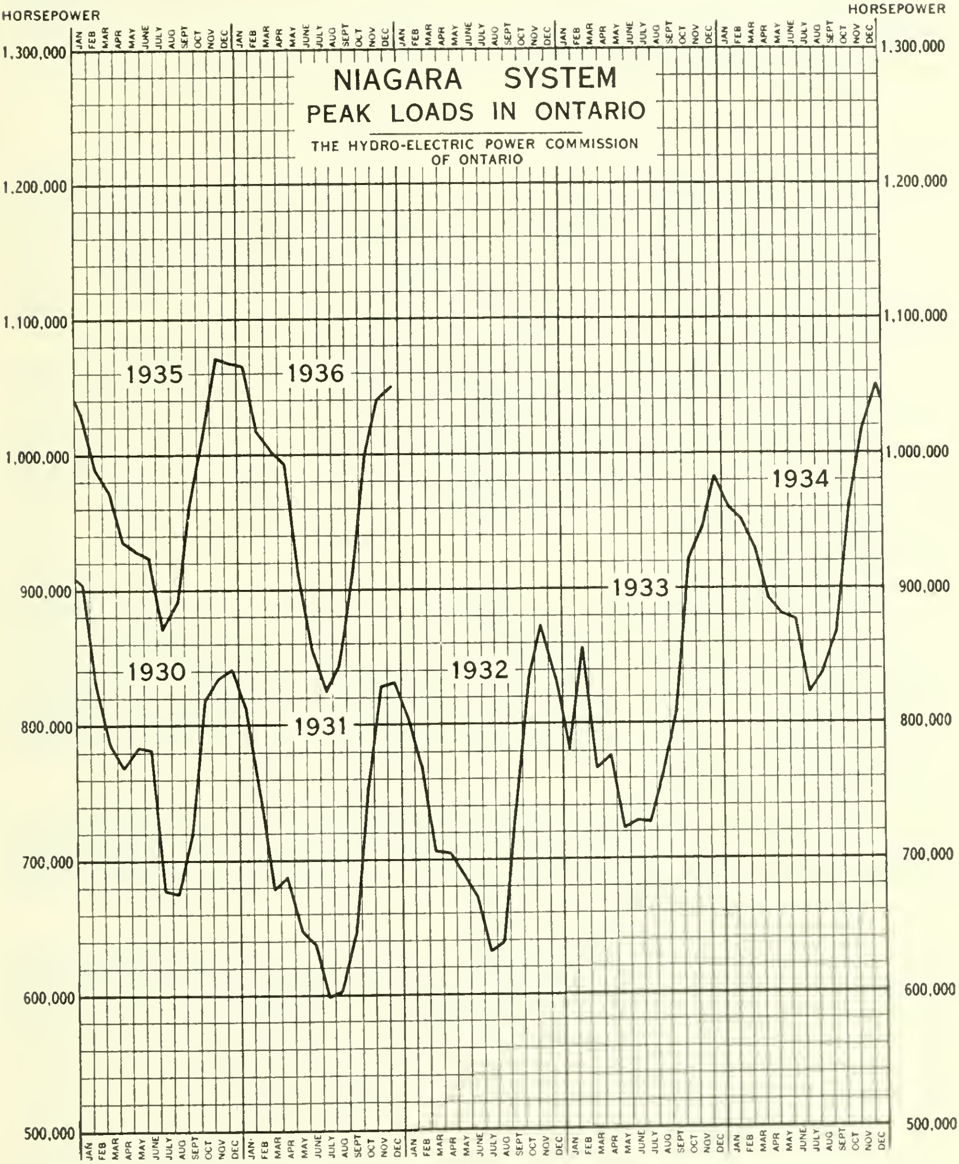
1931
1932
1933
1934



NOTE: This diagram is a continuation of that on facing page

except number 7 machine. New brass bearing sleeves were installed on the main shaft of units number 1, 6, 8, 9, 10 and 11.

On Sunday, June 21, 1936, all load was transferred to other plants in order to make an inspection of the tail-race tunnel. This was found in good condition, with no further indication of breaks resulting from the pressure of the side walls.

Two new 12,000-volt cables were installed in the transformer station, terminating in a new out-door structure at the south end of the building, to provide additional capacity for local circuits.

All buildings and minor equipment were inspected and maintained in good condition.

Chats Falls Station—Ottawa River

The four generating units with auxiliary equipment were available for operation to capacity as and when required during the year, using one half of the available river flow. No power was taken from the machines owned by the Ottawa Valley Power Company, the water available for these units being discharged through the dam.

Bare sections on the earth portion of the dam were seeded with alfalfa with gratifying results. Rock rip-rap was replenished in places where pot holes had been created by wave action. A quantity of waterlogged pulpwood timber was removed from in front of the trash rocks by a new grab hook, operated from the gantry crane on the headworks. All sluices and hatches on the headworks were treated with creosote for preservation. The plank deck on two railway bridges was reconstructed for pedestrian traffic only, using salvaged material.

While there was deficiency in the amount of water in storage in the fall of 1935, there was a greater general precipitation in the drainage area during the fall which maintained the normal winter flow. The minimum river flow of approximately 18,700 c.f.s. occurred during the week ending September 6, while the maximum of approximately 172,200 c.f.s. occurred on May 15, during the spring run-off. This is the highest 24-hour flow since the plant commenced operating.

Details of construction work on the building extension for the 45,000-kv-a frequency-changer set were carried out. The Browning locomotive crane and number 2 power-house crane, used on the construction work in 1935, were completely overhauled.

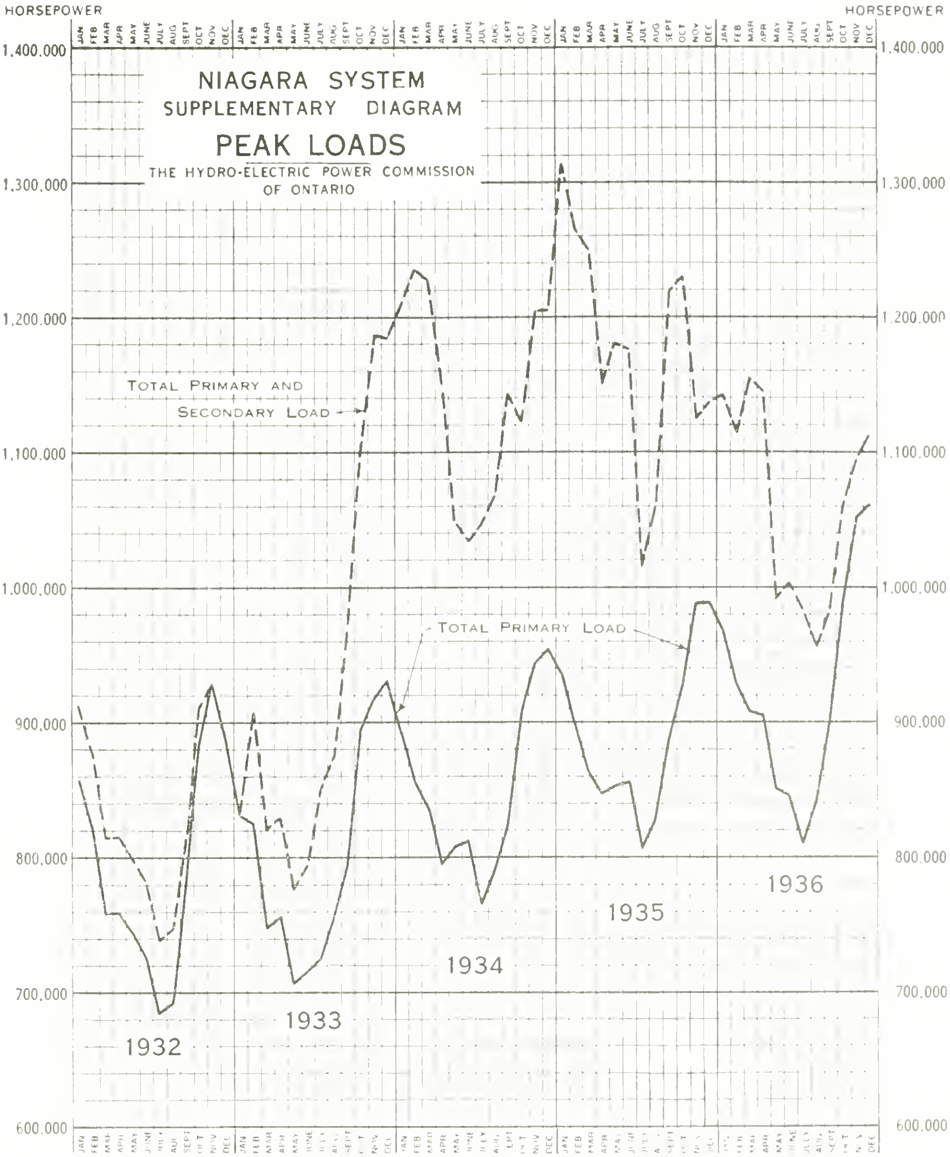
The frequency-changer set was used during the summer to supply power to the Eastern Ontario system, to make up for the loss in generating capacity on the latter system due to lack of precipitation and low river flow during the months of July, August and September. To effect this transfer of energy, one of the 220,000-volt circuits between Chats Falls and Toronto was used to connect to the Eastern Ontario system lines.

The eight additional houses which were under construction last year were completed, and occupied by employees who were living in temporary construction buildings located on Victoria Island. All temporary housing accommodation was dismantled.

Routine inspection and general maintenance was carried out on all equipment, buildings and structures during the year.

DeCew Falls Station

The DeCew Falls station, supplying the 66-2/3-cycle Dominion Power section of the Niagara system, gave satisfactory service during the year, although there was one interruption of 17 minutes to all service, with an



SUPPLEMENTARY DIAGRAM—NIAGARA SYSTEM PEAK LOADS

Notes

TOTAL PRIMARY LOAD: Primary power is power which the Commission is under contractual obligation to supply and for which it is obligated to hold in reserve adequate capacity. The graph above includes only the actual delivery of such power, and does not include the amount by which the primary power contracts exceed actual deliveries

TOTAL PRIMARY AND SECONDARY LOAD: Includes, in addition to the primary load, at-will power which the Commission is under no obligation to hold in reserve. Such power has been sold in Ontario and exported to Quebec and the United States. The above graph includes all secondary power and therefore differs from the graphs on pages 18 and 19 which show only the load in Canada additional 6 minutes to the 44,000-volt system, as a result of the improper functioning of one of the generators supplying the excitation system of the plant.

Main generating unit number 0 was out of service from August 5 to September 9 for inspection and overhaul. During this period the turbine was dismantled, new seal rings and gates installed, stuffing box glands on main shaft repaired and repacked, the governor overhauled and other miscellaneous work carried out. Number 1 unit was out of service from May 23 to June 8. Seal rings were replaced in the turbine, the thrust bearing overhauled, governor repaired and the generator cleaned and varnished.

Mechanical and electrical maintenance was carried out as required in the plant, necessary repairs made to bridges, crushed stone placed on roadways, and stone rip-rap placed at various points on the banks and shore line at the headworks and supply weir.

The 9,000-kv-a frequency-changer set, located at Niagara Falls and supplying power to this system, operated as a base load unit throughout the year, the power for this set being supplied from the Toronto Power generating station.

Hamilton Steam Plant

The steam power station at Hamilton was operated as a standby reserve during the year, with one of the two 10,000-kv-a machines available for power service. The generator of the second machine was operated as a synchronous condenser floating on the Hamilton section of the system. The boiler plant was also used for the generation of steam for commercial purposes. All equipment was regularly maintained and repaired as required.

Transmission

The 220,000-volt transmission lines were operated in parallel with one section of the 110,000-volt system and gave satisfactory service, no difficulties being experienced in connection with their operation or maintenance. There were no interruptions to service, although there were a number of outages on individual circuits caused by lightning and sleet.

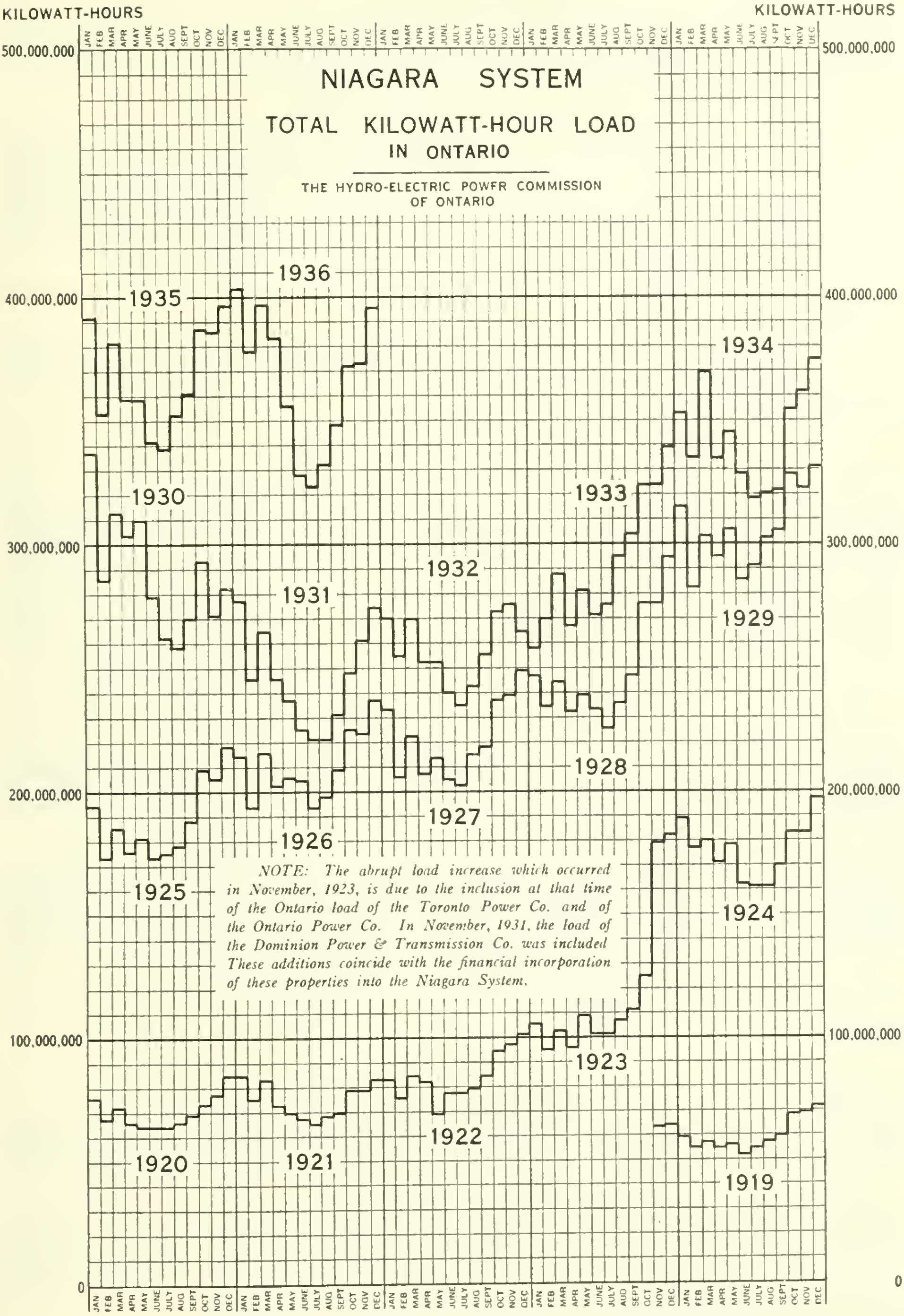
The lines were regularly patrolled, and all brush under and in the immediate vicinity of the circuits, covering some 5,400 acres, was cut. Patrol roads were extended about six miles during the year.

The 110,000-volt transmission circuits were operated during the year as two independent groups supplying power to different sections of the system. No trouble was experienced in operation, although there were two short interruptions to service on one group.

All lines were regularly patrolled and insulators on 377 miles of line were inspected and tested. The angle-iron footings on 986 McGuigan-type towers were inspected at the ground line and reinforced where necessary.

The 60,000-volt power supply to Welland transformer station was discontinued on December 22, 1935, after changes were made to supply all power in this district from the 46,000-volt system.

The operating telephone lines were maintained in good condition, 26 miles being given a general overhaul, and some 13 miles rebuilt by the Operating department.



NOTE: The abrupt load increase which occurred in November, 1923, is due to the inclusion at that time of the Ontario load of the Toronto Power Co. and of the Ontario Power Co. In November, 1931, the load of the Dominion Power & Transmission Co. was included These additions coincide with the financial incorporation of these properties into the Niagara System.

No difficulties were experienced in the operation of the Dominion Power transmission lines. As a result of the installation in 1935 of high-speed relays on the 44,000-volt circuits, there were only three line outages, totalling ten minutes, affecting Hamilton, Brantford and Oakville.

Regular patrol and maintenance was carried out. 17,041 insulators were inspected and 431 defective units replaced. Eighteen transpositions were placed in the 44,000-volt circuits to reduce interference with paralleling communication systems. 880 poles were uncovered at the ground line, cleaned and equipped with the sand-creosote collar, 192 were straightened and 31 towers cleaned and painted.

Transformation

The operation of the 220,000/110,000-13,200-volt Leaside transformer station continued without difficulty through the year. The equipment was regularly inspected and maintained.

All equipment in the 110,000-volt stations gave satisfactory service. There were no failures of high-voltage transformers during the year. Two 2,500-kv-a transformers at Woodstock, which were being rebuilt with modern bracing at the end of last year, were completed. The core bracing in twenty-two 5,000-kv-a and three 2,500-kv-a units was inspected and tightened. Number one 5,000-kv-a synchronous condenser at Toronto (Strachan Avenue) station failed in service on November 25, 1935. This machine has not been repaired. Number 2 unit was removed from service on January 15, 1936, as this equipment was not required under present operating conditions.

Transformer changes were made at Welland to enable this transformer station to be transferred from the 60,000-volt to the 46,000-volt system on December 22, 1935. This change made possible the elimination of power delivery at 12,000, 30,000 and 60,000 volts from Niagara Falls to this district, allowing some 58 miles of transmission circuits to be dismantled.

All outdoor oil circuit-breakers were given two inspections, and repaired where necessary; indoor breakers were inspected on a 12-month schedule. Lightning arresters were overhauled at Cooksville, Guelph and Chatham stations.

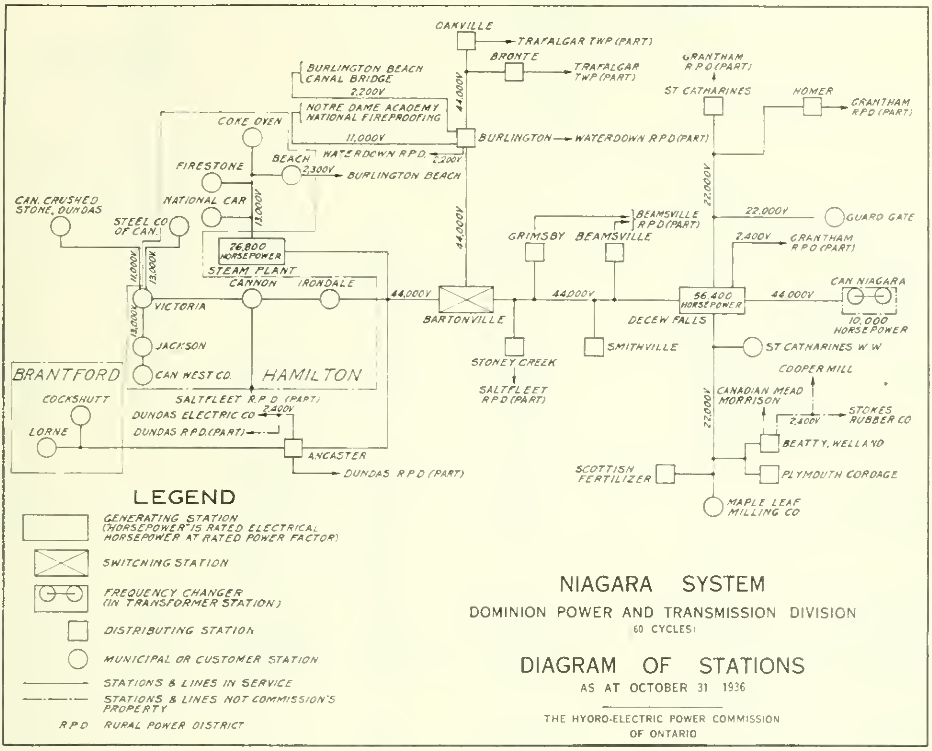
Equipment, buildings and grounds at all stations were properly maintained.

Distribution

New low-tension distributing stations were placed in service at Mannheim, Clarkson and Fruitland. Transformer capacity was increased at Oil Springs, Tillsonburg Rural, Port Stanley, St. Jacobs and Tavistock stations.

There were ten failures of low-tension transformers during the year; six of which were repaired by the field maintenance staff, and three by the manufacturers, with one in progress at the end of the year. All oil circuit-breakers were inspected, and repairs and readjustments made where necessary. Lightning arresters at Wallaceburg were overhauled.

No severe difficulties were encountered in the operation and maintenance of the low-tension lines, although sleet and wind storms caused some damage


OAKVILLE
TRAFALGAR TWP (PART)
BRONTE
TRAFALGAR TWP (PART)
BURLINGTON BEACH CANAL BRIDGE
2,200V
NOTRE DAME ACADEMY
NATIONAL FIREPROOFING
11,000V
44,000V
BURLINGTON
WATERDOWN R P D (PART)
COKE OVEN
FIRESTONE
BEACH
WATERDOWN R.P.D.
2,200V
2,300V
BURLINGTON BEACH
NATIONAL CAR
13,000V
CAN. CRUSHED STONE, DUNDAS
STEEL CO OF CAN.
26,800 HORSEPOWER
STEAM PLANT
11,000V
13,000V
CANNON
IRONDALE
VICTORIA
13,000V
JACKSON
CAN WEST CO.
BRANTFORD
HAMILTON
COCKSHUTT
LORNE
SALTFLEET R.P.D. (PART)
DUNDAS ELECTRIC CO
2,400V
DUNDAS R.P.D. (PART)
ANCASTER
DUNDAS R P D (PART)
44,000V
BARTONVILLE
STONEY CREEK
SALTFLEET R P D (PART)
GRIMSBY
BEAMSVILLE
BEAMSVILLE R P D (PART)
44,000V
SMITHVILLE
GRANTHAM R P D (PART)
ST CATHARINES
HOMER
GRANTHAM R P D (PART)
22,000V
22,000V
GUARD GATE
2,400V
GRANTHAM R P D (PART)
56,400 HORSEPOWER
DECEW FALLS
44,000V
CAN NIAGARA
10,000 HORSEPOWER
ST CATHARINES W W
COOPER MILL
CANADIAN MEAD MORRISON
22,000V
STOKES RUBBER CO
2,400V
BEATTY, WELLAND
PLYMOUTH CORDAGE
SCOTTISH FERTILIZER
MAPLE LEAF MILLING CO
LEGEND
GENERATING STATION ("HORSEPOWER" IS RATED ELECTRICAL HORSEPOWER AT RATED POWER FACTOR)
SWITCHING STATION
FREQUENCY CHANGER (IN TRANSFORMER STATION)
DISTRIBUTING STATION
MUNICIPAL OR CUSTOMER STATION
STATIONS & LINES IN SERVICE
STATIONS & LINES NOT COMMISSION'S PROPERTY
RPD RURAL POWER DISTRICT

NIAGARA SYSTEM
DOMINION POWER AND TRANSMISSION DIVISION
(60 CYCLES)
DIAGRAM OF STATIONS
AS AT OCTOBER 31 1936
THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

to short sections in the Thorold, Stratford, St. Thomas, Chatham and Windsor districts.

Approximately 15 miles of double-circuit line located in the Chatham and Woodstock districts were overhauled and the ground wire removed. The ground wire was removed and pole-top pins were installed on 6.75 miles of single-circuit line in the Cooksville district. Some 45 miles of single-circuit line from Sebringville Junction to Harriston were being overhauled, ground wire removed and pole-top pins installed, with the work about half completed, at the end of the year.

All 25-cycle circuits in the St. Catharines, Welland and Port Colborne area were given a complete overhaul.

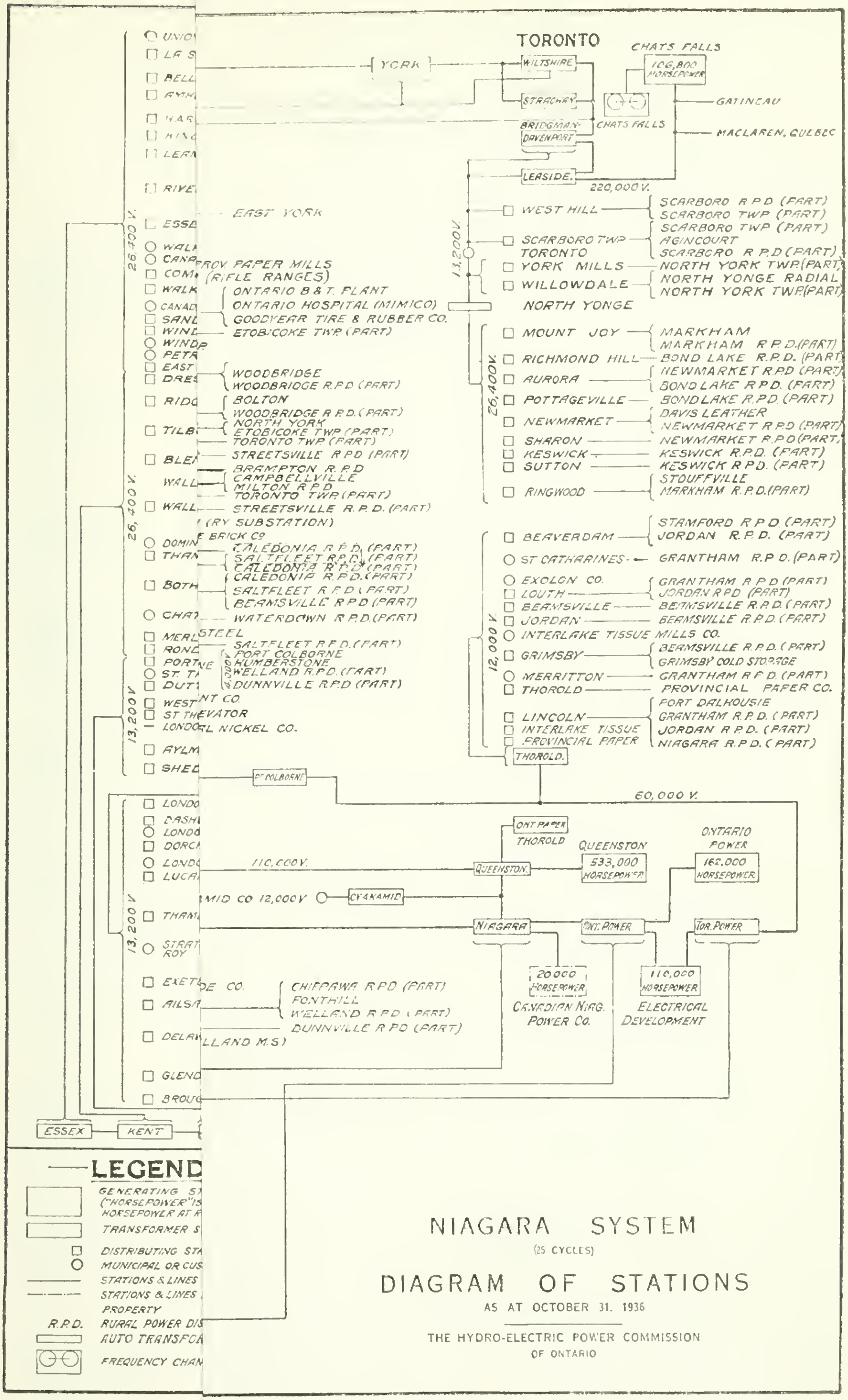
The 13,200-volt line between Islington and Georgetown, purchased from the Toronto Suburban Railway, was overhauled and connected to the system on February 26, 1936.

Railway and wire crossings were made standard in Brantford, St. Thomas, Sarnia and Cooksville districts, and numerous relocations of lines were carried out for highway improvements. Some 15,500 sand-creosote collars, for ground line preservation of poles, were installed.

A new 13,200-volt line to Mannheim distributing station was placed in service. The Clarkson station is supplied from Cooksville transformer station over an unused circuit carried on the Toronto Power steel tower line.

NIAGARA SYSTEM—LOADS OF MUNICIPALITIES—1934-35-36

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Acton	1,044.9	1,125.7	946.1	179.6	
Agincourt	128.0	147.4	150.1		2.7
Ailsa Craig	77.3	89.8	88.9	0.9	
Alvinston	85.6	89.4	86.9	2.5	
Amherstburg	593.5	707.2	681.2	26.0	
Ancaster Township	250.6	282.7	299.2		16.5
Arkona	46.9	48.2	46.3	1.9	
Aurora	981.2	1,016.0	1,186.3		170.3
Aylmer	490.6	487.9	544.2		56.3
Ayr	157.5	167.0	181.3		14.3
Baden	250.2	268.2	267.1	1.1	
Beachville	376.6	395.4	418.2		22.8
Belle River	126.5	127.3	150.1		22.8
Blenheim	383.4	374.0	433.2		59.2
Blyth	86.7	85.8	82.1	3.7	
Bolton	109.7	125.0	122.3	2.7	
Bothwell	99.4	109.3	107.2	2.1	
Brampton	1,991.1	2,168.8	2,326.6		157.8
Brantford	13,212.6	14,023.8	13,446.5	577.3	
Brantford Township	602.3	594.9	603.9		9.0
Bridgeport	118.8	105.9	138.1		32.2
Brigden	72.5	66.7	74.0		7.2
Brussels	107.9	103.2	143.4		40.2
Burford	131.3	139.7	160.1		20.4
Burgessville	30.5	31.5	35.5		4.0
Caledonia	377.7	341.6	361.5		19.9
Campbellville	26.2	26.8	27.6		0.8
Cayuga	111.2	116.6	115.3	1.3	
Chatham	4,587.7	4,821.4	5,067.2		245.8
Chippawa	258.4	258.1	279.1		21.0
Clifford	61.9	64.0	69.5		5.5
Clinton	394.7	395.4	443.1		47.7
Comber	191.7	116.6	122.5		5.9
Cottam	64.3	62.3	58.3		4.0
Courtright	40.2	37.2	37.0	0.2	
Dashwood	37.9	61.9	77.3		15.4
Delaware	39.9	43.1	43.1		
Dorchester	76.1	103.1	91.8	11.3	
Drayton	91.1	92.1	113.0		20.9
Dresden	288.9	289.9	308.3		18.4
Drumbo	66.5	66.0	59.2	6.8	
Dublin	31.7	36.4	39.6		3.2
Dundas	1,329.1	1,495.2	1,550.9		55.7
Dunnville	853.3	930.3	963.0		32.7
Dutton	209.2	206.1	232.1		26.0
Elmira	544.2	680.9	700.5		19.6
Elora	295.3	287.5	290.4		2.9
Embro	88.2	86.0	107.2		21.2
Erieau	62.7	67.0	58.3	8.7	
Erie Beach	11.9	8.0	12.6		4.6


TORONTO
CHATS FALLS
106,800 HORSEPOWER
GATINEAU
MACLAREN, QUEBEC
YORK
WILTSHIRE
STRACHAN
BRIDGMAN-DAVENPORT
CHATS FALLS
LEASIDE.
220,000 V.
EAST YORK
WEST HILL
SCARBORO R.P.D. (PART)
SCARBORO TWP. (PART)
SCARBORO TWP. TORONTO
SCARBORO TWP. (PART)
AGINCOURT
SCARBORO R.P.D. (PART)
13,200 V.
YORK MILLS
NORTH YORK TWP. (PART)
WILLOWDALE
NORTH YONGE RADIAL
NORTH YORK TWP. (PART)
NORTH YONGE
MOUNT JOY
MARKHAM
MARKHAM R.P.D. (PART)
RICHMOND HILL
BOND LAKE R.P.D. (PART)
AURORA
NEWMARKET R.P.D. (PART)
BOND LAKE R.P.D. (PART)
26,400 V.
POTTAGEVILLE
BOND LAKE R.P.D. (PART)
NEWMARKET
DAVIS LEATHER
NEWMARKET R.P.D. (PART)
SHARON
NEWMARKET R.P.D. (PART)
KESWICK
KESWICK R.P.D. (PART)
SUTTON
KESWICK R.P.D. (PART)
RINGWOOD
STOUFFVILLE
MARKHAM R.P.D. (PART)
PROV. PAPER MILLS
(RIFLE RANGES)
ONTARIO B & T. PLANT
ONTARIO HOSPITAL (MIMICO)
GOODYEAR TIRE & RUBBER CO.
ETOBICOKE TWP. (PART)
WOODBRIDGE
WOODBRIDGE R.P.D. (PART)
BOLTON
WOODBRIDGE R.P.D. (PART)
NORTH YORK
ETOBICOKE TWP. (PART)
TORONTO TWP. (PART)
STREETSVILLE R.P.D. (PART)
BRAMPTON R.P.D.
CAMPBELLVILLE
MILTON R.P.D.
TORONTO TWP. (PART)
STREETSVILLE R.P.D. (PART)
(RY. SUBSTATION)
BRICK CO.
CALEDONIA R.P.D. (PART)
SALTFLEET R.P.D. (PART)
CALEDONIA R.P.D. (PART)
CALEDONIA R.P.D. (PART)
SALTFLEET R.P.D. (PART)
BEAMSVILLE R.P.D. (PART)
WATERDOWN R.P.D. (PART)
STEEL
SALTFLEET R.P.D. (PART)
PORT COLBORNE
HUMBERSTONE
WELLAND R.P.D. (PART)
DUNNVILLE R.P.D. (PART)
NT CO.
EVATOR
NICKEL CO.
BEAVERDAM
STAMFORD R.P.D. (PART)
JORDAN R.P.D. (PART)
ST. CATHARINES
GRANTHAM R.P.D. (PART)
EXOLON CO.
GRANTHAM R.P.D. (PART)
LOUTH
JORDAN R.P.D. (PART)
BEAMSVILLE
BEAMSVILLE R.P.D. (PART)
JORDAN
BEAMSVILLE R.P.D. (PART)
INTERLAKE TISSUE MILLS CO.
12,000 V.
GRIMSBY
BEAMSVILLE R.P.D. (PART)
GRIMSBY COLD STORAGE
MERRITTON
GRANTHAM R.P.D. (PART)
THOROLD
PROVINCIAL PAPER CO.
LINCOLN
PORT DALHOUSIE
GRANTHAM R.P.D. (PART)
INTERLAKE TISSUE
JORDAN R.P.D. (PART)
PROVINCIAL PAPER
NIAGARA R.P.D. (PART)
THOROLD.
PT. COLBORNE
60,000 V.
ONT. PAPER THOROLD
QUEENSTON
533,000 HORSEPOWER
ONTARIO POWER
162,000 HORSEPOWER
110,000 V.
QUEENSTON
MID CO. 12,000 V
CYANAMID
NIAGARA
ONT. POWER
TOR. POWER
20,000 HORSEPOWER
CANADIAN NIAG. POWER CO.
110,000 HORSEPOWER
ELECTRICAL DEVELOPMENT
DE CO.
CHIPPAWA R.P.D. (PART)
FONTHILL
WELLAND R.P.D. (PART)
DUNNVILLE R.P.D. (PART)
LLAND M.S.)
26,400 V.
26,400 V.
13,200 V.
13,200 V.
ESSEX
KENT
LEGEND
GENERATING ST
("HORSEPOWER" IS
HORSEPOWER AT R
TRANSFORMER S
DISTRIBUTING STA
MUNICIPAL OR CUS
STATIONS & LINES
STATIONS & LINES
PROPERTY
R.P.D. RURAL POWER DIS
AUTO TRANSFOR
FREQUENCY CHAN

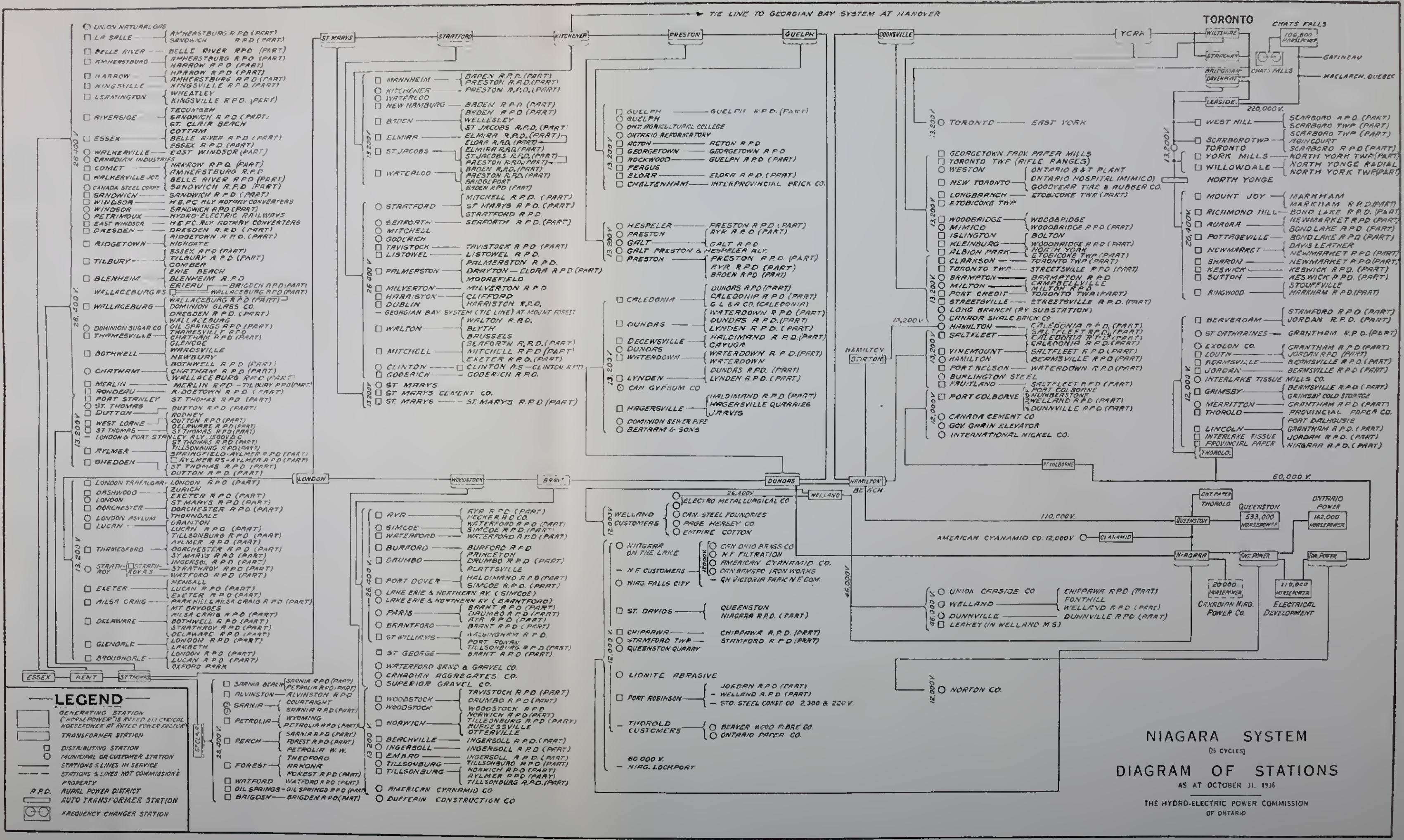
NIAGARA SYSTEM

(25 CYCLES)

DIAGRAM OF STATIONS

AS AT OCTOBER 31, 1936

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO


LEGEND
GENERATING STATION ("HORSEPOWER" IS RATED ELECTRICAL HORSEPOWER AT RATED POWER FACTOR)
TRANSFORMER STATION
DISTRIBUTING STATION
MUNICIPAL OR CUSTOMER STATION
STATIONS & LINES IN SERVICE
STATIONS & LINES NOT COMMISSIONED PROPERTY
R.P.D. RURAL POWER DISTRICT
AUTO TRANSFORMER STATION
FREQUENCY CHANGER STATION
TIE LINE TO GEORGIAN BAY SYSTEM AT HANOVER
TORONTO
CHATS FALLS
106,800 HORSEPOWER
GATINEAU
MACLAREN, QUEBEC
220,000 V.
WILTSHIRE
STRACHAN
BRIDGMAN-DAVENPORT
LEASIDE
ST MARYS
STRATFORD
KITCHENER
PRESTON
GUELPH
COOKSVILLE
YORK
LONDON
WOODSTOCK
BRANT
DUNDAS
HAMILTON STATION
HAMILTON BEACH
WELLAND
PT COLBORNE
THOROLD
ONT PAPER THOROLD
QUEENSTON
QUEENSTON 533,000 HORSEPOWER
ONTARIO POWER 162,000 HORSEPOWER
NIAGARA
CAN. POWER
TOR. POWER
20000 HORSEPOWER CANADIAN NIAG. POWER CO.
110,000 HORSEPOWER ELECTRICAL DEVELOPMENT
CYANAMID
AMERICAN CYANAMID CO. 12,000 V
110,000 V.
60,000 V.
46,000 V.
26,400 V
13,200 V
12,000 V
ESSEX
KENT
ST THOMAS
ST CLAIR
UNION NATURAL GAS
LA SALLE
BELLE RIVER
AMHERSTBURG
HARROW
KINGSVILLE
LEAMINGTON
RIVERSIDE
ESSEX
WALKERVILLE
CANADIAN INDUSTRIES
COMET
WALKERVILLE JCT.
CANADA STEEL CORPS
SANDWICH
WINDSOR
PETRIMOUX
EAST WINDSOR
DRESDEN
RIDGETOWN
TILBURY
BLENHEIM
WALLACEBURG R S
WALLACEBURG
DOMINION SUGAR CO
THAMESVILLE
BOTHWELL
CHATHAM
MERLIN
RONDEAU
PORT STANLEY
ST. THOMAS
DUTTON
WEST LORNE
ST THOMAS
LONDON & PORT STANLEY RLY, 1500 V DC
AYLMER
BELMONT
LONDON TRAFALGAR
DASHWOOD
LONDON
DORCHESTER
LONDON ASYLUM
LUCAN
THAMESFORD
STRATHROY
EXETER
AILSA CRAIG
DELAWARE
GLENCOE
BROUGHDALE
SARNIA BEACH
ALVINSTON
SARNIA
PETROLIA
PERCH
FOREST
WATFORD
OIL SPRINGS
BRIGDEN
MANNHEIM
KITCHENER
WATERLOO
NEW HAMBURG
BADEN
ELMIRA
ST JACOBS
WATERLOO
STRATFORD
SEAFORTH
MITCHELL
GODERICH
TAVISTOCK
LISTOWEL
PALMERSTON
MILVERTON
HARRISTON
DUBLIN
GEORGIAN BAY SYSTEM (TIE LINE) AT MOUNT FOREST
WALTON
MITCHELL
CLINTON
GODERICH
ST MARYS
ST MARYS CEMENT CO.
ST. MARYS
AYR
SIMCOE
WATERFORD
BURFORD
DRUMBO
PORT DOVER
LAKE ERIE & NORTHERN RY. (SIMCOE)
LAKE ERIE & NORTHERN RY. (BRANTFORD)
PARIS
BRANTFORD
ST WILLIAMS
ST GEORGE
WATERFORD SAND & GRAVEL CO.
CANADIAN AGGREGATES CO.
SUPERIOR GRAVEL CO.
WOODSTOCK
NORWICH
BEACHVILLE
INGERSOLL
EMBRO
TILLSONBURG
AMERICAN CYANAMID CO
DUFFERIN CONSTRUCTION CO
GUELPH
ONT. AGRICULTURAL COLLEGE
ONTARIO REFORMATORY
ACTON
GEORGETOWN
ROCKWOOD
FERGUS
ELORA
CHELTENHAM
INTERPROVINCIAL BRICK CO.
HESPELER
PRESTON
GALT
GALT PRESTON & HESPELER RLY.
CALEDONIA
DUNDAS
DECEWSVILLE
WATERDOWN
LYNDEN
CAN GYPSUM CO
HAGERSVILLE
DOMINION SEWER PIPE
BERTRAM & SONS
WELLAND CUSTOMERS
ELECTRO METALLURGICAL CO
CAN. STEEL FOUNDRIES
PAGE HERSEY CO.
EMPIRE COTTON
NIAGARA ON THE LAKE
N.F. CUSTOMERS
NIAG. FALLS CITY
CAN OHIO BRASS CO
N F FILTRATION
AMERICAN CYANAMID CO.
CAN ARMAPO IRON WORKS
QN VICTORIA PARK N.F. COM.
ST. DAVIDS
QUEENSTON
CHIPPAWA
STAMFORD TWP
QUEENSTON QUARRY
LIONITE ABRASIVE
PORT ROBINSON
STD. STEEL CONST. CO 2,300 & 220 V.
THOROLD CUSTOMERS
BEAVER WOOD FIBRE CO.
ONTARIO PAPER CO.
60 000 V.
NIAG. LOCKPORT
TORONTO — EAST YORK
GEORGETOWN PROV. PAPER MILLS
TORONTO TWP (RIFLE RANGES)
WESTON
NEW TORONTO
ONTARIO S & T PLANT
ONTARIO HOSPITAL (MIMICO)
GOODYEAR TIRE & RUBBER CO.
LONGBRANCH
ETOBICOKE TWP
WOODBRIDGE
MIMICO
ISLINGTON
KLEINBURG
ALBION PARK
CLARKSON
TORONTO TWP
BRAMPTON
MILTON
PORT CREDIT
STREETSVILLE
LONG BRANCH (RY SUBSTATION)
CANADA SHALE BRICK CO
HAMILTON
SALTFLEET
VINEMOUNT
HAMILTON
PORT NELSON
BURLINGTON STEEL
FRUITLAND
PORT COLBORNE
CANADA CEMENT CO
GOV. GRAIN ELEVATOR
INTERNATIONAL NICKEL CO.
UNION CARBIDE CO
WELLAND
DUNNVILLE
LEAHEY (IN WELLAND M S)
NORTON CO.
WEST HILL
SCARBORO TWP
TORONTO
YORK MILLS
WILLOWDALE
NORTH YONGE
MOUNT JOY
RICHMOND HILL
AURORA
POTTAGEVILLE
NEWMARKET
SHARON
KESWICK
SUTTON
RINGWOOD
BEAVERDAM
ST CATHARINES
EXOLON CO.
LOUTH
BEAMSVILLE
JORDAN
INTERLAKE TISSUE MILLS CO.
GRIMSBY
MERRITTON
THOROLD
LINCOLN
INTERLAKE TISSUE
PROVINCIAL PAPER

NIAGARA SYSTEM

(25 CYCLES)

DIAGRAM OF STATIONS

AS AT OCTOBER 31, 1936

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

NIAGARA SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36—Continued

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Essex	340.5	404.8	538.8		134.0
Etobicoke Township	4,194.3	4,449.0	4,657.8		208.8
Exeter	396.8	420.3	395.4	24.9	
Fergus	833.7	882.7	1,062.3		179.6
Fonthill	138.1	145.5	130.7	14.8	
Forest	337.8	331.1	344.9		13.8
Galt	5,615.8	5,988.5	6,409.7		421.2
Georgetown	987.9	1,089.8	1,181.3		91.5
Glencoe	164.9	166.7	198.0		31.3
Goderich	938.3	947.3	1,027.2		79.9
Granton	102.1	100.0	111.2		11.2
Guelph	8,207.0	8,688.3	8,822.4		134.1
Hagersville	810.2	521.5	894.0		372.5
Hamilton	87,983.6	98,859.8	96,655.4	2,204.4	
Harriston	269.7	271.0	287.4		16.4
Harrow	387.4	376.6	475.2		98.6
Hensall	145.1	152.4	150.8	1.6	
Hespeler	1,713.8	1,901.4	1,890.6	10.8	
Highgate	90.3	64.3	73.8		9.5
Humberstone	367.8	365.6	407.5		41.9
Ingersoll	1,860.4	2,076.7	2,144.6		67.9
Jarvis	158.7	148.5	183.6		35.1
Kingsville	420.9	447.4	487.9		40.5
Kitchener	16,469.5	16,976.5	18,000.6		1,024.1
Lambeth	109.2	101.8	93.8	8.0	
La Salle	192.1	197.3	202.1		4.8
Leamington	1,253.3	1,284.2	1,833.8		549.6
Listowel	811.0	887.4	928.9		41.5
London	30,281.0	31,876.0	32,373.0		497.0
London Township Voted Area	410.6	449.8	460.4		10.6
Long Branch	733.9	761.4	860.6		99.2
Lucan	131.0	121.3	126.6		5.3
Lynden	69.8	82.0	84.3		2.3
Markham	236.2	233.9	274.8		40.9
Merlin	74.0	75.0	67.0	8.0	
Merritton	3,140.4	3,368.3	4,698.6		1,330.3
Milton	527.6	604.6	831.1		226.5
Milverton	252.0	261.4	321.7		60.3
Mimico	2,347.1	2,426.3	2,245.3	181.0	
Mimico Asylum	100.0	175.0	132.0	43.0	
Mitchell	411.5	415.5	430.0		14.5
Moorefield	45.5	50.0	53.6		3.6
Mount Brydges	93.8	97.5	90.4	7.1	
Newbury	41.5	48.5	43.0	5.5	
New Hamburg	393.8	395.4	478.6		83.2
Newmarket	1,273.4	1,300.2	1,555.0		254.8
New Toronto	5,565.7	5,942.3	5,884.7	57.6	
Niagara Falls	8,665.9	9,241.3	9,113.9	127.4	
Niagara-on-the-Lake	559.0	506.0	570.2		64.2
Norwich	304.9	358.6	350.5	8.1	

NIAGARA SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36—Continued

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Oil Springs	179.8	188.4	211.2		22.8
Ontario Agricultural College	485.2	477.2	367.3	109.9	
Ontario Central Reformatory	256.7	247.4	285.0		37.6
Otterville	92.9	91.6	110.4		18.8
Palmerston	396.0	420.3	408.0	12.3	
Paris	1,132.8	1,262.2	1,157.4	104.8	
Parkhill	128.9	128.9	150.1		21.2
Petrolia	677.8	714.3	812.2		97.9
Plattsville	52.2	55.3	55.0	0.3	
Point Edward	467.8	1,060.3	975.8	84.5	
Port Colborne	1,422.2	1,405.9	1,604.0		198.1
Port Credit	688.5	658.2	693.0		34.8
Port Dalhousie	502.7	523.8	619.3		95.5
Port Dover	297.8	321.6	348.2		26.6
Port Rowan	64.3	63.0	65.1		2.1
Port Stanley	240.1	215.9	254.8		38.9
Preston	2,341.4	2,577.0	2,624.6		47.6
Princeton	85.9	95.4	100.8		5.4
Queenston	112.8	103.6	103.2	0.4	
Richmond Hill	304.3	340.5	360.3		19.8
Ridgetown	397.7	467.8	479.2		11.4
Riverside	1,073.0	911.8	958.7		16.9
Rockwood	92.5	91.1	99.7		8.6
Rodney	121.9	123.2	122.6	0.6	
St. Catharines	8,852.4	10,270.3	10,413.4		143.1
St. Clair Beach	57.6	71.4	79.0		7.6
St. George	138.8	164.3	159.5	4.8	
St. Jacobs	146.9	274.8	256.0	18.8	
St. Marys	1,259.2	1,314.1	1,280.6	33.5	
St. Thomas	5,986.5	6,246.6	7,079.0		832.4
Sarnia	7,397.9	7,558.9	7,666.2		107.3
Scarboro Township	3,099.2	3,281.5	3,357.9		76.4
Seaforth	485.7	518.7	508.5	10.2	
Simcoe	1,705.2	1,675.7	1,977.2		301.5
Springfield	60.0	85.7	62.0	23.7	
Stamford Township	1,913.0	1,966.2	2,059.8		93.6
Stouffville	183.3	196.8	221.1		24.3
Stratford	6,562.9	6,436.0	6,904.8		468.8
Strathroy	920.9	971.8	1,155.5		183.7
Streetsville		99.8	112.6		12.8
Sutton	147.8	151.8	192.0		40.2
Tavistock	444.5	471.8	483.1		11.3
Tecumseh	290.0	371.0	289.8	81.2	
Thamesford	176.2	155.0	160.2		5.2
Thamesville	165.7	188.4	193.5		5.1
Thedford	143.0	135.1	110.5	25.5	
Thorndale	37.8	42.0	37.4	4.6	
Thorold	1,782.1	1,958.6	2,221.3		262.7
Tilbury	331.1	558.9	516.0	42.9	
Tillsonburg	843.1	870.5	951.1		80.6

NIAGARA SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36—Concluded

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Toronto	280,525.4	297,723.8	311,327.1		13,603.3
Toronto Township	1,936.7	2,034.8	2,164.2		129.4
Wallaceburg	1,821.6	1,829.8	1,955.7		125.9
Wardsville	32.7	30.8	32.9		2.1
Waterdown	196.2	206.4	218.6		12.2
Waterford	322.4	362.4	398.8		36.4
Waterloo	2,729.2	2,864.6	2,946.4		81.8
Watford	192.5	187.6	234.6		47.0
Welland	3,758.7	3,745.7	4,428.1		682.4
Wellesley	95.2	119.0	95.0	24.0	
West Lorne	97.0	107.2	132.4		25.2
Weston	2,706.4	2,955.8	3,376.6		420.8
Wheatley	117.1	129.3	139.1		9.8
Woodbridge	304.7	340.5	343.1		2.6
Woodstock	4,731.9	5,073.7	5,227.9		154.2
Wyoming	65.8	64.6	72.6		8.0
York, East, Township	5,656.4	5,826.0	5,861.4		35.4
York, North, Township	3,188.8	3,258.7	3,544.6		285.9
Zurich	71.4	68.6	81.2		12.6

NIAGARA SYSTEM—LOADS OF NEW MUNICIPALITY

Municipality	Date connected	Initial load	Oct. 1936	Change in load	
				Decrease	Increase
Windsor (Greater)	Jan. 1, 1936	37,815.2	40,254.5		2,439.3

NIAGARA SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36

Rural Power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Acton	10.0	11.0	11.0		
Ailsa Craig	5.6	6.4	6.4		
Alvinston	3.1	3.1	3.1		
Amherstburg	412.0	483.6	515.1		31.5
Aylmer	317.5	313.3	392.2		78.9
Ayr	42.5	43.5	49.0		5.5
Baden	378.2	416.7	458.8		42.1
Beamsville	1,043.7	1,111.3	1,487.0		375.7
Belle River	172.3	194.0	273.2		79.2
Blenheim	144.2	163.8	181.0		17.2
Bond Lake	999.2	1,179.3	1,311.8		132.5
Bothwell	99.4	196.5	225.9		29.4
Brampton	132.7	147.6	143.9	3.7	
Brant	490.4	498.1	668.1		170.0
Brigden	35.2	46.6	50.7		4.1

NIAGARA SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36—Continued

Rural Power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Burford	148.0	154.6	178.8		24.2
Caledonia	323.2	372.2	415.8		43.6
Chatham	479.2	468.6	515.4		46.8
Chippawa	122.5	122.8	145.2		22.4
Clinton	122.6	128.2	143.7		15.5
Delaware	285.8	316.6	354.5		37.9
Dorchester	312.0	340.1	386.4		46.3
Dresden	43.3	38.9	44.5		5.6
Drumbo	95.4	77.5	111.1		33.6
Dundas	695.7	741.4	782.4		41.0
Dunnville	39.0	41.5	41.5		
Dutton	127.3	133.1	143.8		10.7
Elmira	79.7	82.1	93.8		11.7
Elora	104.2	111.2	123.1		11.9
Essex	199.6	217.4	234.1		16.7
Exeter	252.7	239.2	247.6		8.4
Forest	28.0	36.8	40.4		3.6
Galt	184.7	200.5	222.6		22.1
Georgetown	132.7	147.4	170.2		22.8
Goderich	84.2	110.3	106.1	4.2	
Grantham Township	630.1	629.1	649.8		20.7
Guelph	434.1	491.4	535.4		44.0
Haldimand	200.6	225.1	314.0		88.9
Harriston	16.6	20.1	21.7		1.6
Harrow	286.8	287.4	339.9		52.5
Ingersoll	369.7	427.2	500.0		72.8
Jordan	324.8	321.9	345.2		23.3
Keswick	350.0	249.5	375.7		126.2
Kingsville	500.3	480.8	635.8		155.0
Listowel	140.2	174.2	196.7		22.5
London	1,559.0	1,848.6	2,028.1		179.5
Lucan	52.0	55.3	55.0	0.3	
Lynden	173.2	177.2	227.3		50.1
Markham	407.3	466.2	555.1		88.9
Merlin	167.0	212.1	214.6		2.5
Milton	181.6	175.6	178.3		2.7
Milverton	84.3	83.1	103.4		20.3
Mitchell	185.0	190.4	215.1		24.7
Newmarket	267.1	260.6	334.4		73.8
Niagara	527.0	611.7	548.7	63.0	
Norwich	252.3	306.2	336.6		30.4
Oil Springs	39.9	37.7	39.3		1.6
Palmerston	54.7	52.8	56.2		3.4
Petrolia	25.3	29.3	30.3		1.0
Preston	830.2	948.3	1,018.9		70.6
Ridgetown	258.8	271.1	302.8		31.7
St. Jacobs	239.5	249.8	242.5	7.3	
St. Marys	194.6	220.5	245.5		25.0
St. Thomas	629.4	700.4	794.4		94.0
Saltfleet	962.1	1,058.0	1,310.9		252.9

NIAGARA SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36—Concluded

Rural Power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Sandwich	940.6	1,030.9	1,095.4		64.5
Sarnia	491.1	490.7	613.2		122.5
Scarboro	371.7	397.4	507.2		109.8
Seaforth	53.7	63.7	71.2		7.5
Simcoe	229.1	249.6	325.3		75.7
Stamford	194.3	176.6	182.5		5.9
Stratford	116.9	158.6	192.0		33.4
Strathroy	109.6	115.0	125.5		10.5
Streetsville	318.4	360.6	435.6		75.0
Tavistock	169.7	205.0	242.6		37.6
Thamesville	97.9	120.9	140.2		19.3
Tilbury	122.0	158.4	218.2		59.8
Tillsonburg	324.9	369.8	448.7		78.9
Wallaceburg	193.0	223.2	231.2		8.0
Walsingham	182.0	239.8	334.2		94.4
Walton	63.7	103.2	148.5		45.3
Waterdown	763.1	983.4	1,267.2		283.8
Waterford	218.2	215.0	265.9		50.9
Watford	25.7	17.5	36.7		19.2
Welland	1,083.6	1,168.9	1,265.3		96.4
Woodbridge	512.9	594.3	728.5		134.2
Woodstock	512.8	582.0	667.8		85.8

GEORGIAN BAY SYSTEM

The Georgian Bay system peak and average loads show increases over last year. The peak load, which occurred in July, was two per cent greater than last year's peak, which occurred in August. The energy distributed was six per cent in excess of last year.

Owing to the abnormally hot weather in July, combined with low precipitation in July and August, the storage water reserves were seriously depleted. This, combined with the increase in system load, accounts for an increase in the amount of energy transferred from the Niagara system, through the Hanover frequency-changer set. It was also necessary, in order to conserve storage water and for purposes of voltage regulation in the Severn district, to purchase power from the Orillia Water, Light and Power Commission from August 14 until the end of the year. Power was also purchased from the Orillia Commission during a test period from November 12 to December 10, and while the Wasdells auto-transformer was out of service for repairs from May 1 to 16.

Generating Stations

At Eugenia Falls generating station a temporary wooden base under the 1,500-kv-a synchronous condenser was replaced by a permanent concrete foundation. Due to the failure of springs from which the domestic water supply was formerly secured a new water treatment system was installed along with a pump so the water from the tailrace can be pumped and treated for domestic use. A new cottage was built to replace operator's cottage "E" which was destroyed by fire December 20.

At Hanover generating station several broken runner vanes in both turbines were repaired by welding. A defective wing wall on the south-east side of the headworks was reinforced by the addition of a new concrete wall dowelled to the old wall.

At Walkerton generating station No. 1 governor pressure tank, which had become defective, was replaced with a new tank. Repairs were made to prevent further scouring of the canal bottom and undermining of the east concrete wall of the headrace canal near the headgates.

At Mount Forest frequency-changer station the armature winding in the 60-cycle end of the frequency-changer set was destroyed, February 28, by fire resulting from insulation failure. A complete new winding was purchased and installed.

At Hanover frequency-changer station an operating mechanism was installed for opening and closing the large doors on the machine building. Trouble had been experienced in closing these doors during wind storms.

At Big Chute generating station new gate bolts, link pins, eccentric pins and wrist pins were installed in No. 1, No. 2 and No. 3 turbines. A complete armature winding, which was purchased new in December, 1928, and held in stock for emergency use, was installed in No. 1 generator and the coils of the old winding will be used as spares for No. 2 and No. 3 generators which are similar to No. 1 unit.

At Wasdells Falls generating station the timbers supporting the deck over the tailrace were replaced with steel beams, a new timber deck was laid and a mechanism for handling the tailrace stop logs was installed. The 24-volt station storage battery was replaced.

At South Falls generating station a forced air cooling system was installed to cool the 1,200 kv-a, 6,600/22,000-volt bank of transformers in order to increase the capacity. A 30 kv-a, single-phase transformer of the 3-phase, 90 kv-a bank of service transformers failed in service February 4, and was repaired at the manufacturer's factory.

Transformer and Distributing Stations

At Alliston distributing station one 75 kv-a transformer failed in service July 9, and was shipped to the manufacturer for repairs.

Big Chute distributing station of 100 kv-a capacity was placed in service July 1 to serve the Honey Harbour portion of Medonte rural power district.

At Buckskin, Beaumaris and Innisfil distributing stations obsolete high-voltage fuses were replaced with fuses of modern design.

At Falkenburg distributing station the single-type low-voltage fuses were replaced with repeater type fuses.

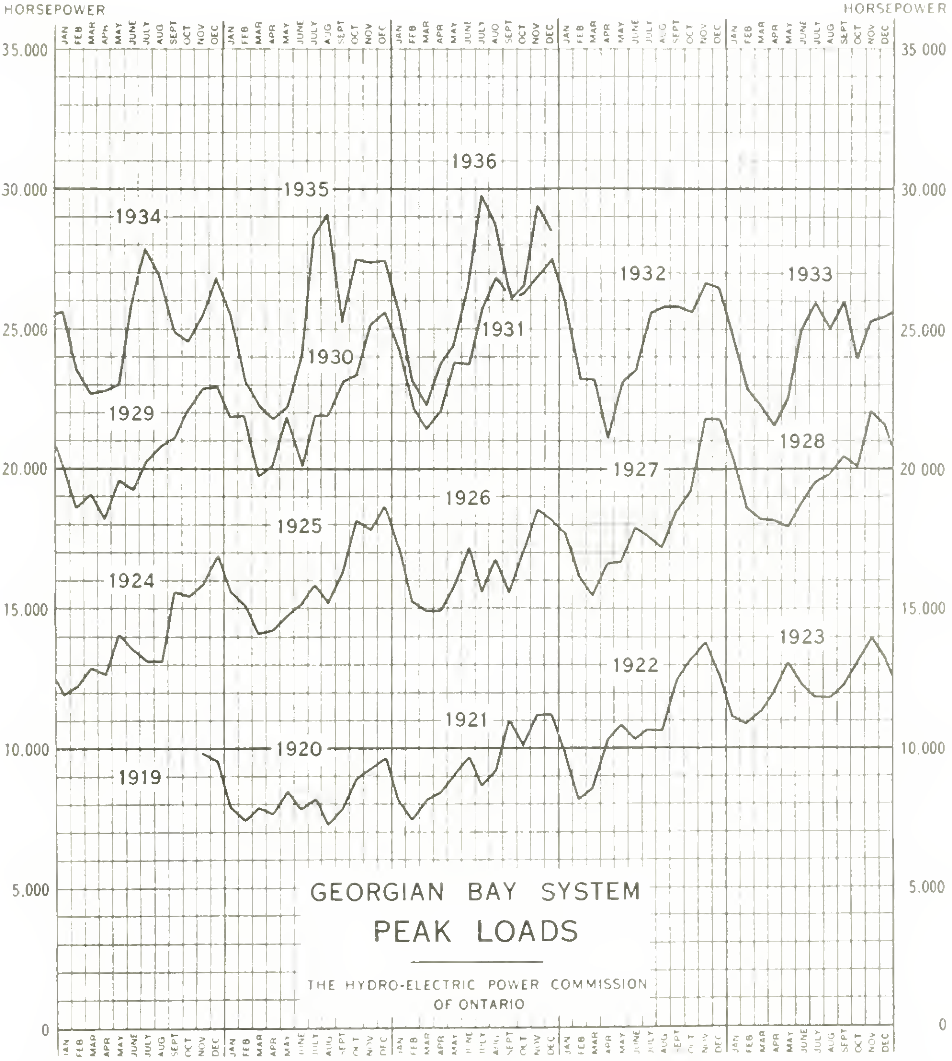
At Penetang rural distributing station an additional 75 kv-a transformer was installed to bring the station capacity up to 150 kv-a.

At Wasdells auto-transformer station the 1,500 kv-a auto-transformer failed in service during a severe lightning storm May 2. It was shipped to the manufacturer for repairs and returned to service May 16.

Twelve municipalities were assisted with the operation and maintenance of their distribution systems on thirty-one occasions.

Transmission Lines

Due to continued dry weather bush fires broke out along the transmission line right-of-way between Big Chute generating station and Waubaushene



NOTE:—The Georgian Bay system includes the Severn, Eugenia, Wasdells, Muskoka and Bala districts. In the diagram the load for the Muskoka district is not included until November, 1924. Details respecting this load for preceding years are given in earlier annual reports. The load of the Bala district is not included in above graph until April, 1931, previous meter records being incomplete.

in the early part of August and ten poles were damaged by fire and had to be replaced.

During unusually hot weather early in May while frost was still in the ground five poles heaved out of the ground and overturned in the line between South Falls generating station and Huntsville. An inspection of this line revealed that 140 other poles had heaved to some extent and they were lowered to their original depth.

During a severe wind storm March 27, eight poles were broken in the Severn district.

In Owen Sound, a short section of line along the dock interfered with the operation of coal unloading equipment. It was re-routed, and the line entrance to Owen Sound distributing station changed.

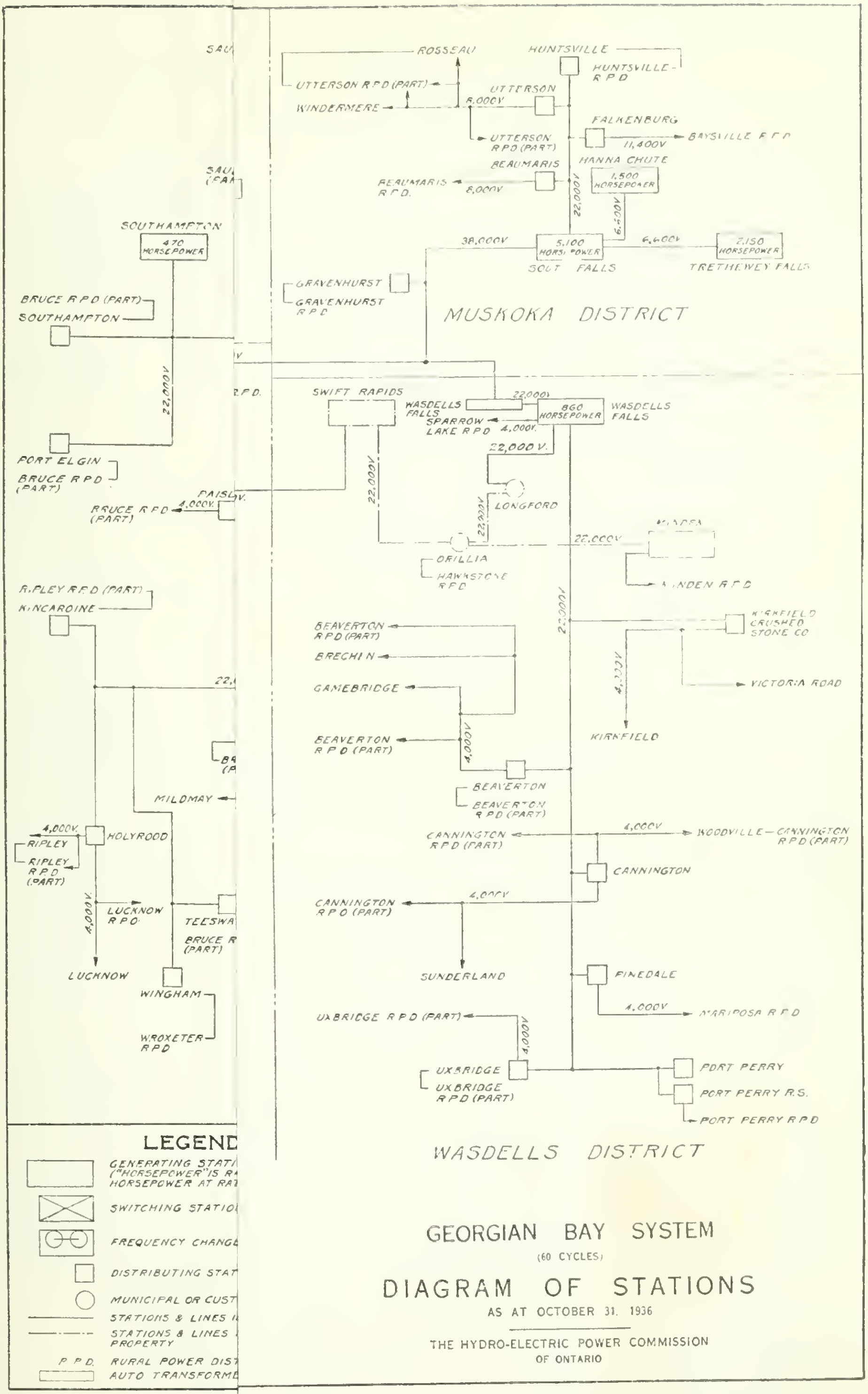
Due to changes in highway locations it was necessary to move certain poles between Big Chute generating station and Waubaushene, between Waubaushene and Midland, between Collingwood and Eugenia generating station, and between Markdale and Chatsworth.

The lines west of Hanover and between Eugenia generating station and Markdale were reinforced by the erection of 116 storm guys.

In addition to routine patrol and maintenance of lines, 160 defective poles were replaced, 500 poles were reinforced by the addition of stubs, 725 poles were cut off above defective areas at the ground line and lowered and 2,700 poles received preservative treatment at the ground line by the application of sand-creosote collars, Approximately 300 defective crossarms, 1,350 defective insulators and 1,800 defective insulator pins were replaced.

GEORGIAN BAY SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Alliston	212.3	210.3	249.6		39.3
Arthur	136.7	130.0	156.3		26.3
Bala	109.0	113.0	135.0		22.0
Barrie	2,228.3	2,396.4	2,473.6		77.2
Beaverton	175.0	175.6	228.8		53.2
Beeton	105.7	97.5	96.8	0.7	
Bradford	161.9	171.8	192.5		20.7
Brechin	47.5	62.8	49.3	13.5	
Camp Borden	247.0	272.4	282.8		10.4
Cannington	141.2	145.3	142.5	2.8	
Chatsworth	53.2	56.3	66.3		10.0
Chesley	423.6	492.6	504.0		11.4
Coldwater	245.3	316.0	264.0	52.0	
Collingwood	1,139.1	1,206.2	1,170.0	36.2	
Cookstown	65.7	71.6	65.1	6.5	
Creemore	104.5	101.7	100.5	1.2	
Dundalk	145.0	198.4	188.2	10.2	
Durham	337.2	288.2	314.3		26.1
Elmvale	134.8	152.4	151.8	0.6	
Elmwood	63.1	54.7	68.0		13.3


ROSSEAU
HUNTSVILLE
HUNTSVILLE R.P.D.
UTTERSON R.P.D. (PART)
WINDERMERE
8,000V
UTTERSON
UTTERSON R.P.D. (PART)
FALKENBURG
11,400V
BAYSVILLE R.P.D.
HANNA CHUTE
1,500 HORSEPOWER
BEAUMARIS
BEAUMARIS R.P.D.
8,000V
22,000V
6,600V
38,000V
5,100 HORSEPOWER
SOUTH FALLS
6,600V
2,150 HORSEPOWER
TRETHEWEY FALLS
GRAVENHURST
GRAVENHURST R.P.D.
MUSKOKA DISTRICT
SOUTHAMPTON
470 HORSEPOWER
BRUCE R.P.D. (PART)
SOUTHAMPTON
22,000V
PORT ELGIN
BRUCE R.P.D. (PART)
PAISLEY
BRUCE R.P.D. (PART)
4,000V.
SWIFT RAPIDS
WASDELLS FALLS
22,000V
860 HORSEPOWER
WASDELLS FALLS
SPARROW LAKE R.P.D.
4,000V.
22,000 V.
LONGFORD
22,000V
ORILLIA
HAWKSTONE R.P.D.
22,000V
LINDSAY
LINDEN R.P.D.
22,000V
KIRKFIELD CRUSHED STONE CO.
4,000V
VICTORIA ROAD
KIRKFIELD
RIPLEY R.P.D. (PART)
KINCARDINE
BEAVERTON R.P.D. (PART)
BRECHIN
GAMEBRIDGE
BEAVERTON R.P.D. (PART)
4,000V
BEAVERTON
BEAVERTON R.P.D. (PART)
MILDMAY
4,000V.
RIPLEY
RIPLEY R.P.D. (PART)
HOLYROOD
4,000V.
LUCKNOW R.P.D.
LUCKNOW
TEESWATER
BRUCE R.P.D. (PART)
WINGHAM
WROXETER R.P.D.
CANNINGTON R.P.D. (PART)
4,000V
WOODVILLE—CANNINGTON R.P.D. (PART)
CANNINGTON
CANNINGTON R.P.D. (PART)
4,000V
SUNDERLAND
PINEDALE
4,000V
MARIPOSA R.P.D.
UXBRIDGE R.P.D. (PART)
4,000V
UXBRIDGE
UXBRIDGE R.P.D. (PART)
PORT PERRY
PORT PERRY R.S.
PORT PERRY R.P.D.
WASDELLS DISTRICT
LEGEND
GENERATING STATI
("HORSEPOWER" IS R
HORSEPOWER AT RAT
SWITCHING STATIO
FREQUENCY CHANGE
DISTRIBUTING STAT
MUNICIPAL OR CUST
STATIONS & LINES
STATIONS & LINES
PROPERTY
R.P.D. RURAL POWER DIST
AUTO TRANSFORME

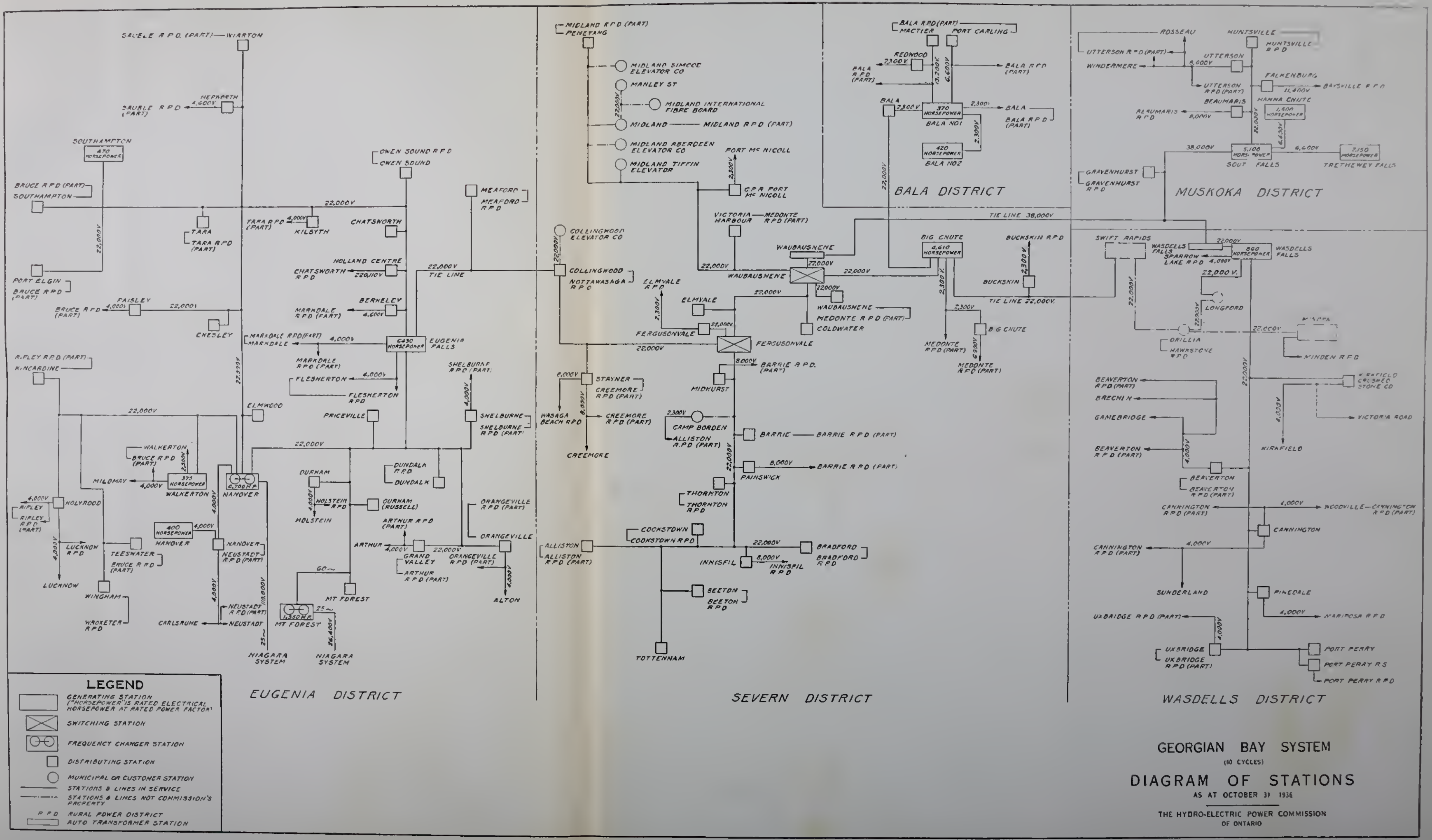
GEORGIAN BAY SYSTEM

(60 CYCLES)

DIAGRAM OF STATIONS

AS AT OCTOBER 31, 1936

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO


EUGENIA DISTRICT
SEVERN DISTRICT
BALA DISTRICT
MUSKOKA DISTRICT
WASDELLS DISTRICT
LEGEND
GENERATING STATION ("HORSEPOWER" IS RATED ELECTRICAL HORSEPOWER AT RATED POWER FACTOR)
SWITCHING STATION
FREQUENCY CHANGER STATION
DISTRIBUTING STATION
MUNICIPAL OR CUSTOMER STATION
STATIONS & LINES IN SERVICE
STATIONS & LINES NOT COMMISSION'S PROPERTY
R P D RURAL POWER DISTRICT
AUTO TRANSFORMER STATION
SAUBLE R P D (PART) — WIARTON
HEPWORTH
SAUBLE R P D (PART)
SOUTHAMPTON
470 HORSEPOWER
BRUCE R P D (PART)
SOUTHAMPTON
22,000V
TARA
TARA R P D (PART)
TARA R P D (PART)
KILSYTH
CHATSWORTH
OWEN SOUND R P D
OWEN SOUND
MEAFORD
MEAFORD R P D
PORT ELGIN
BRUCE R P D (PART)
PAISLEY
BRUCE R P D (PART)
CHESLEY
HOLLAND CENTRE
CHATSWORTH R P D
BERKELEY
MARKDALE R P D (PART)
22,000V TIE LINE
MARKDALE R P D (PART)
MARKDALE
6430 HORSEPOWER
EUGENIA FALLS
MARKDALE R P D (PART)
FLESHERTON
FLESHERTON R P D
SHELBURNE R P D (PART)
SHELBURNE
SHELBURNE R P D (PART)
RIPLEY R P D (PART)
KINCARDINE
ELMWOOD
PRICEVILLE
WALKERTON
BRUCE R P D (PART)
MILDMAY
375 HORSEPOWER
WALKERTON
6,700 H.P.
HANOVER
HOLYROOD
RIPLEY
RIPLEY R P D (PART)
400 HORSEPOWER
HANOVER
HANOVER
NEUSTADT R P D (PART)
LUCKNOW R P D
TEESWATER
BRUCE R P D (PART)
LUCKNOW
WINGHAM
WROXETER R P D
CARLSRUHE
NEUSTADT R P D (PART)
NEUSTADT
NIAGARA SYSTEM
DURHAM
HOLSTEIN R P D
HOLSTEIN
DURHAM (RUSSELL)
DUNDALK R P D
DUNDALK
ARTHUR R P D (PART)
ARTHUR
GRAND VALLEY
ARTHUR R P D (PART)
ORANGEVILLE R P D (PART)
ORANGEVILLE R P D (PART)
ORANGEVILLE
ALTON
MT FOREST
1,350 H.P.
MT FOREST
NIAGARA SYSTEM
MIDLAND R P D (PART)
PENETANG
MIDLAND SIMCOE ELEVATOR CO
MANLEY ST
MIDLAND INTERNATIONAL FIBRE BOARD
MIDLAND
MIDLAND R P D (PART)
MIDLAND ABERDEEN ELEVATOR CO
MIDLAND TIFFIN ELEVATOR
PORT MC NICOLL
C P R PORT MC NICOLL
COLLINGWOOD ELEVATOR CO
COLLINGWOOD
NOTTAWASAGA R P D
VICTORIA HARBOUR
MEDONTE R P D (PART)
WAUBAUSHENE
WAUBAUSHENE
WAUBAUSHENE
MEDONTE R P D (PART)
COLDWATER
ELMVALE R P D
ELMVALE
FERGUSONVALE
FERGUSONVALE
STAYNER
CREEMORE R P D (PART)
WASAGA BEACH R P D
CREEMORE R P D (PART)
CREEMORE
BARRIE R P D (PART)
MIDHURST
CAMP BORDEN
ALLISTON R P D (PART)
BARRIE
BARRIE R P D (PART)
BARRIE R P D (PART)
PAINSWICK
THORNTON
THORNTON R P D
COOKSTOWN
COOKSTOWN R P D
ALLISTON
ALLISTON R P D (PART)
INNISFIL
INNISFIL R P D
BRADFORD
BRADFORD R P D
BEETON
BEETON R P D
TOTTENHAM
BALA R P D (PART)
MACTIER
PORT CARLING
REDWOOD
BALA R P D (PART)
BALA R P D (PART)
BALA
370 HORSEPOWER
BALA NO1
BALA
BALA R P D (PART)
420 HORSEPOWER
BALA NO2
TIE LINE 38,000V
BIG CHUTE
4,610 HORSEPOWER
BUCKSKIN R P D
BUCKSKIN
TIE LINE 22,000V
BIG CHUTE
MEDONTE R P D (PART)
MEDONTE R P D (PART)
ROSSEAU
HUNTSVILLE
HUNTSVILLE R P D
UTTERSON R P D (PART)
WINDERMERE
UTTERSON
FALKENBURG
UTTERSON R P D (PART)
BAYSVILLE R P D
BEAUMARIS
HANNA CHUTE
BEAUMARIS R P D
1,500 HORSEPOWER
5,100 HORSEPOWER
SOUTH FALLS
2,150 HORSEPOWER
TRETHEWEY FALLS
GRAVENHURST
GRAVENHURST R P D
SWIFT RAPIDS
WASDELLS FALLS
860 HORSEPOWER
WASDELLS FALLS
SPARROW LAKE R P D
LONGFORD
ORILLIA
HAWKSTONE R P D
MINDEN R P D
KIRKFIELD CRUSHED STONE CO
BEAVERTON R P D (PART)
BRECHIN
GAMEBRIDGE
VICTORIA ROAD
BEAVERTON R P D (PART)
KIRKFIELD
BEAVERTON
BEAVERTON R P D (PART)
CANNINGTON R P D (PART)
WOODVILLE—CANNINGTON R P D (PART)
CANNINGTON
CANNINGTON R P D (PART)
SUNDERLAND
PINEDALE
UXBRIDGE R P D (PART)
MARIPOSA R P D
UXBRIDGE
UXBRIDGE R P D (PART)
PORT PERRY
PORT PERRY R.S.
PORT PERRY R P D

GEORGIAN BAY SYSTEM
(60 CYCLES)

DIAGRAM OF STATIONS
AS AT OCTOBER 31 1936

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO

GEORGIAN BAY SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36—Concluded

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Flesherton	87.2	79.2	91.3		12.1
Grand Valley	101.2	106.4	123.6		17.2
Gravenhurst	657.4	650.6	657.8		7.2
Hanover	966.7	1,029.5	1,046.2		16.7
Hepworth	26.9	32.9	33.7		0.8
Holstein	16.6	18.2	17.9	0.3	
Huntsville	886.9	863.2	904.6		41.4
Kincardine	560.8	552.7	585.6		32.9
Kirkfield	26.9	25.8	24.6	1.2	
Lucknow	243.9	262.2	271.4		9.2
Markdale	152.4	151.7	186.0		34.3
MacTier	122.0	134.0	129.0	5.0	
Meaford	413.5	467.1	482.0		14.9
Midland	2,709.9	2,984.2	2,904.3	79.9	
Mildmay	74.5	81.0	89.2		8.2
Mount Forest	373.7	412.8	418.6		5.8
Neustadt	34.8	32.4	27.3	5.1	
Orangeville	518.8	529.8	571.2		41.4
Owen Sound	3,205.6	3,307.8	3,727.4		419.6
Paisley	117.9	116.0	117.9		1.9
Penetanguishene	649.5	638.6	653.4		14.8
Port Carling	70.0	87.0	145.0		58.0
Port Elgin	218.7	318.3	276.6	41.7	
Port McNicholl	77.3	75.7	77.0		1.3
Port Perry	209.4	238.8	262.0		23.2
Priceville	17.8	15.1	15.9		0.8
Ripley	60.3	58.3	58.3		
Rosseau	48.3	36.4	36.9		0.5
Shelburne	235.0	224.1	211.4	12.7	
Southampton	242.0	214.0	224.9		10.9
Stayner	195.0	196.1	242.6		46.5
Sunderland	57.9	59.6	65.6		6.0
Tara	72.4	81.7	84.8		3.1
Teeswater	113.1	111.7	132.5		20.8
Thornton	27.6	30.0	28.0	2.0	
Tottenham	59.9	61.0	59.9	1.1	
Uxbridge	209.2	226.9	250.7		23.8
Victoria Harbour	65.4	71.3	70.0	1.3	
Victoria Road	10.0	10.6	10.7		0.1
Walkerton	451.8	465.3	561.0		95.7
Waubaushene	38.4	42.2	85.3		43.1
Wiarton	234.9	256.7	272.2		15.5
Windermere	24.6	23.6	20.9	2.7	
Wingham	371.8	374.8	362.2	12.6	
Woodville	55.6	64.6	58.4	6.2	

GEORGIAN BAY SYSTEM—LOADS OF NEW MUNICIPALITY

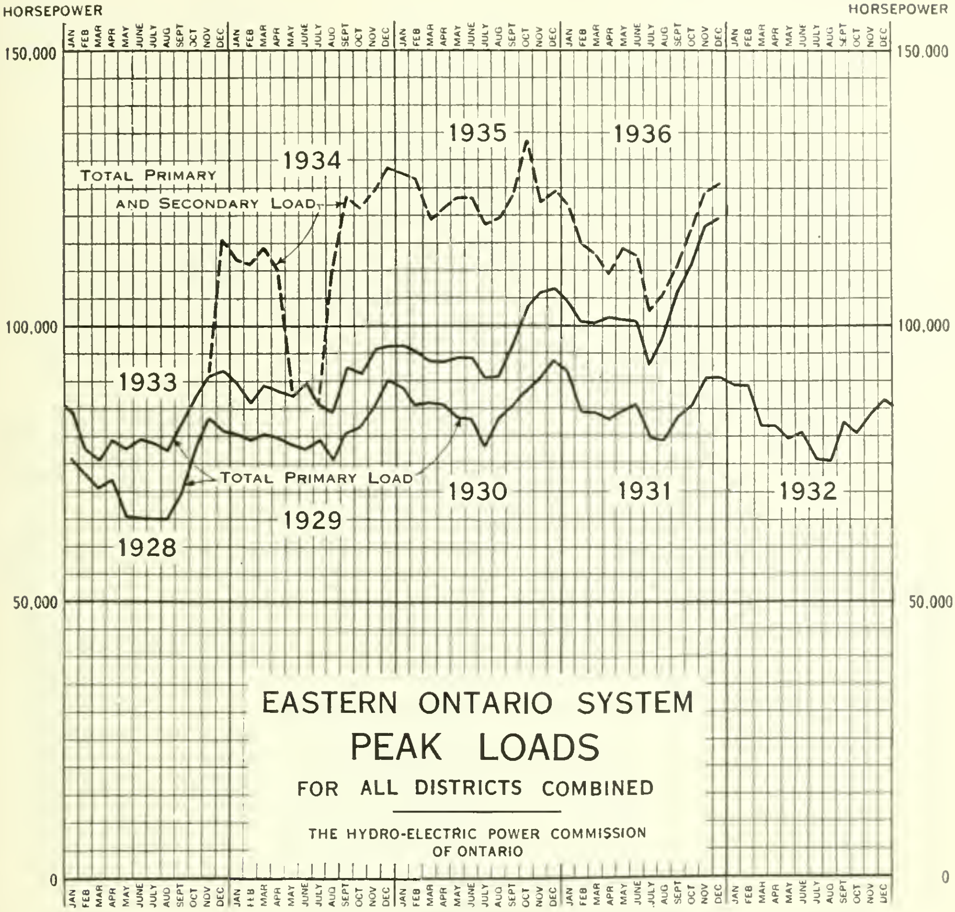
Municipality	Date connected	Initial load	Oct. 1936	Change in Load	
				Decrease	Increase
Carlsruhe	Nov. 1, 1935	5.0	5.0		

GEORGIAN BAY SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36

Rural power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Alliston	74.5	86.9	100.2		13.3
Arthur	3.2	3.2	4.0		0.8
Bala	144.0	152.0	110.0	42.0	
Barrie	227.4	240.8	301.2		60.4
Baysville	42.9	64.3	80.1		15.8
Beaumaris	112.6	116.0	123.3		7.3
Beaverton	131.6	138.0	135.4	2.6	
Beeton	5.0	5.0	5.0		
Bradford	46.1	55.5	52.1	3.4	
Bruce	94.7	141.4	137.1	4.3	
Buckskin	17.9	19.3	17.2	2.1	
Cannington	50.5	51.9	41.0	10.9	
Chatsworth	8.7	7.3	8.0		0.7
Cookstown	0.8	0.8	1.2		0.4
Creemore	55.0	55.0	55.0		
Elmvale	65.5	67.0	75.0		8.0
Flesherton	7.7	8.3	7.7	0.6	
Gravenhurst	26.7	22.3	29.3		7.0
Hawkestone	101.8	75.6	93.3		17.7
Huntsville	59.5	57.8	86.4		28.6
Innisfil	179.6	127.3	182.3		55.0
Mariposa	142.9	152.5	171.6		19.1
Markdale	37.9	41.4	42.0		0.6
Medonte	20.0	19.0	46.1		27.1
Midland	22.0	41.1	97.0		55.9
Nottawasaga	32.8	32.4	36.4		4.0
Orangeville	36.1	47.9	41.1		6.8
Owen Sound	37.0	36.7	52.7		16.0
Port Perry	112.0	124.6	124.4	0.2	
Ripley	10.3	10.3	11.3		1.0
Sauble	9.2	7.8	24.3		16.5
Shelburne	31.1	31.6	47.7		16.1
Sparrow Lake	128.7	106.3	161.1		54.8
Tara	51.5	58.3	81.1		22.8
Thornton	13.1	13.6	12.8		0.8
Utterson	35.0	47.6	60.5		12.9
Uxbridge	97.4	121.3	108.1	13.2	
Wasaga Beach	86.0	79.0	110.9		31.9
Wroxeter	106.7	110.9	115.0		4.1

GEORGIAN BAY SYSTEM—NEW RURAL POWER DISTRICT LOADS

Rural power district	Date connected	Initial load	Oct. 1936	Change in load	
				Decrease	Increase
Dundalk	Jan. 23, 1936	7.6	8.4		0.8
Meaford	Nov. 1, 1935	8.0	15.0		7.0
Neustadt	May 1, 1936	0.4	0.8		0.4
Minden	Dec. 21, 1935	30.8	29.5	1.3	
Tottenham	April 1, 1936	0.4	0.4		



EASTERN ONTARIO SYSTEM

The Eastern Ontario system monthly primary peaks and average loads have again shown substantial increases over the previous fiscal year and have without exception exceeded all recorded maxima for corresponding months in any year. The maximum primary peak increased 7.6 per cent and the total primary kilowatt-hours increased 11.6 per cent.

Secondary power to the extent of 104,028,300 kilowatt-hours was supplied to the steam generator at the Howard Smith Paper Mills at Cornwall.

A considerable portion of the load on this system is supplied from nine Commission-owned generating stations on the Trent river. These stations, under favourable stream flow conditions, in the order of approximately 2,400 c.f.s., have a combined output capacity of some 53,000 horsepower. However, on several occasions during past years capacity reductions of considerable magnitude have been experienced when prevailing stream flow has dropped to minimum weekly average values of between 600 and 700 c.f.s. An unusually dry period started during the latter part of June, 1936, and

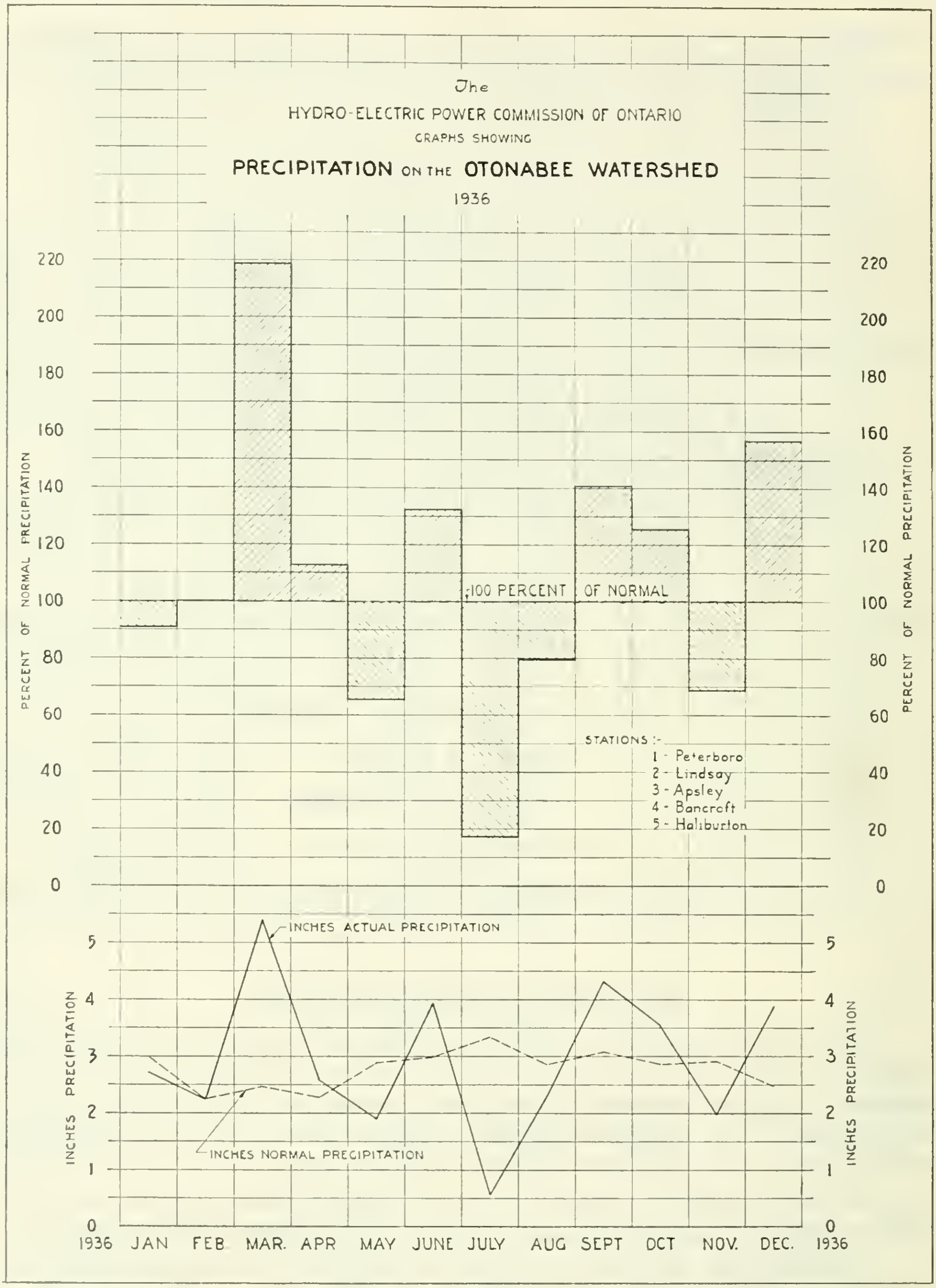


PLATE A—PRECIPITATION DATA—1936

The upper graph represents the estimated actual monthly precipitation on the Otonabee watershed expressed as a percentage of the normal precipitation.

The estimate is based upon the actual and normal return of the Meteorological Service for Peterboro, Lindsay, Bancroft and Haliburton.

Although the numerical values differ from month to month the normal precipitation is taken as 100 per cent. hence the solidly hatched areas represent the amount by which the precipitation exceeded the average while the dotted hatched area represents in a similar manner the deficiencies.

The lower graph shows the actual and normal precipitation in inches of rain. The figures used for the actual precipitation are the numerical averages of the monthly returns from the five stations listed above. The normal figures are derived similarly but are the averages for a period of years.

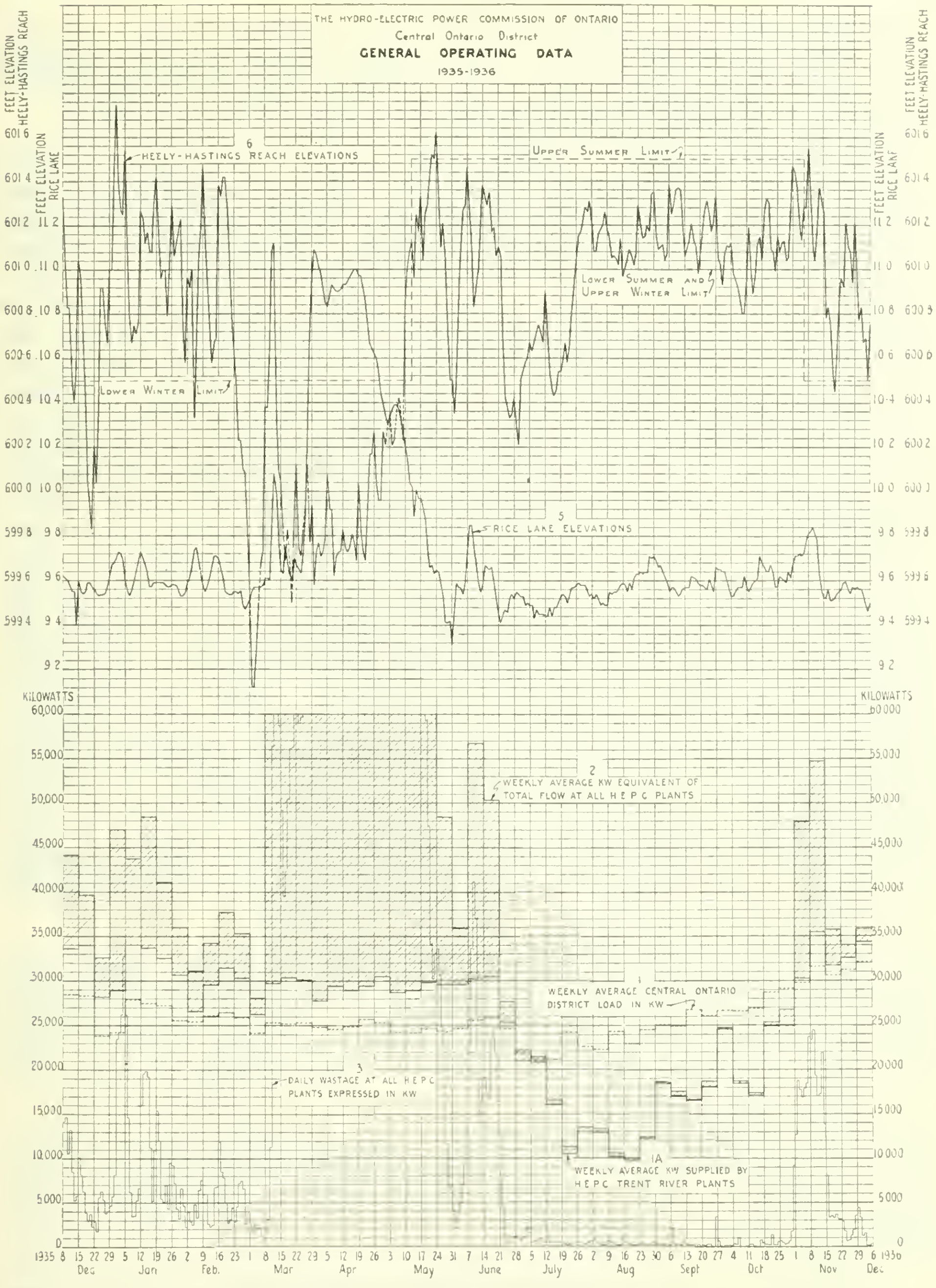


PLATE B—GENERAL OPERATING DATA—December 8, 1935, to December 6, 1936

Graph No. 1—System average weekly load in kilowatts which includes power purchased from the Gatineau Power Company.

Graph No. 1a—Weekly average load in kilowatts supplied by H-E.P.C. plants on the Trent and Otonabee rivers.

Graph No. 2—Weekly average power equivalent of total flow at all H-E.P.C. Plants. This equals the weekly average load supplied by these plants, plus the power equivalent of the weekly average wastage at these plants. This wastage is shown by the dotted hatched area between curves 2 and 1a.

Graph No. 3—Average daily wastage at all H-E.P.C. plants. In the weekly aggregate the area under this graph equals the wastage represented by the dotted hatched area between curves 2 and 1a.

Graph No. 5—Midnight elevations of Rice Lake.

Graph No. 6—Midnight elevations of Heely-Hastings reach.

continued practically without a break until the middle of August. In addition, temperatures and wind were considerably in excess of normal, resulting in extremely heavy evaporation losses. As a consequence, stream flow on the Trent river again fell to the record low levels of 1931 and 1933.

The marked reduction in generating capacity in this district made it evident during the latter part of July that customer load reductions, particularly in the Central Ontario district, were inevitable if an additional source of power could not be made available at short notice to augment existing sources of supply. The only readily available sources of adequate capacity to meet this emergency was the reserve supply which might be ordered under the 60-cycle contract with the Gatineau Power Company and that which might be made available from the Commission's frequency changer at Chats Falls generating station. Unfortunately the reduction in capacity of the Trent river generating stations was of such magnitude that line and transformer station facilities for transmitting power from the Gatineau Power Company into the Central Ontario district were already taxed to their safe limits, and as a consequence additional power from the Gatineau Power Company would not have relieved the situation in this critical centre as the capacity of the connecting facilities could not have been augmented in time.

The alternative was to provide a source of power feeding directly into the Central Ontario district. Accordingly arrangements were completed for the release of one of the three 220,000-volt, 25-cycle, Niagara system lines which extend between Chats Falls and Leaside transformer station in Toronto. This line was interconnected with one of the Central Ontario district 44,000-volt lines on July 25 at a point where the lines cross, approximately six miles west of Norwood, thereby making available to this district a direct supply of 60-cycle power from the frequency-changer set at Chats Falls. Power from this source was continued until about the end of October when the stream flow on the Trent river had recovered sufficiently to ensure a sustained output capacity from the local generating sources comparable with the seasonal load normally carried by these plants.

When reductions in generating capacity due to low flow in the Trent river first became evident, service to the steam generator at the Howard Smith Paper Mills at Cornwall was discontinued. Later the supply available from the frequency-changer set at Chats Falls was at times in excess of that required for primary load purposes, and the steam generator was returned to service in order to dispose of all surplus energy as it became available.

Surplus power from the Commission's generating stations in the Madawaska district amounting to a total of 13,538,394 kilowatt-hours, with a maximum peak of 5,338 horsepower, was transferred to the interconnected system network over the 33,000-volt line which extends between Galetta and Smiths Falls.

During the year the usual program of general plant inspection and maintenance was carried out. A number of turbines were unwatered and inspected, and necessary repairs and adjustments made. The governors in the various plants were inspected and adjusted. Several of the forebays were unwatered, racks cleaned, sunken debris removed and the concrete carefully inspected. Lightning arresters were overhauled during the winter season. A number of high-voltage electrolytic arresters were replaced by an improved type of modern arrester, thus avoiding future periodical overhauling with its attendant expense.

High-tension oil breakers were inspected and overhauled in accordance with the number of times they had operated under trouble conditions. Defective high-tension bushings were replaced in a number of oil breakers and transformers. Painting of buildings, structures, and apparatus was carried out at numerous places throughout the system. Further details are given below regarding the maintenance of the various stations and lines.

Generating Stations

At Sidney, plant No. C-2, the station site was further improved by planting seedling trees.

At Frankford, plant No. C-5, defective upper guide bearings were replaced on two of the generators. Additional protective barriers were installed as a safety measure in front of the 6,600-volt fuses.

At Hagues Reach, plant No. C-9, the main shaft of number three unit had to be replaced when a serious crack developed at a circular keyway where the thrust collar is attached to the shaft. The babbit in the thrust bearing was damaged and had to be replaced. A defective guide bearing was also replaced. The windings of the generator were thoroughly cleaned and painted with an insulating varnish. Units number one and number two were thoroughly inspected but only minor adjustments were necessary. Three defective coils were replaced in one of the 1,350-kv-a, three-phase, 44,000-volt transformers which failed in service during an electrical storm. When this failure occurred the manhole cover was blown off the transformer striking an adjacent transformer, and damaging one of the high-tension bushings which had to be replaced. A defective section of the supervisory control cable had to be replaced. As a safety measure, railings were extended along the forebay wall. Additional fencing was installed in order to prevent unauthorized entry into the station property.

At Seymour, plant No. C-11, the turbines were all inspected but no extensive maintenance was found necessary. The crown gear of one unit was replaced and a defective idler and shaft was replaced on another unit. A defective ball bearing was replaced in the turbine exciter. All high-tension oil breakers had to be overhauled on three occasions. A new 24-volt storage battery was installed.

At Heely Falls, plant No. C-14, a defective ball-thrust bearing was replaced on one of the turbines. A gate-limiting device was made up and installed on this unit. Defective oil-cooling coils were replaced on two units. The relief valves on two units were overhauled. 44,000-volt potential transformers were installed to facilitate synchronizing between the 44,000-volt line, to which the emergency connection to the Chats Falls frequency changer had been made, and the 44,000-volt station bus.

At Auburn, plant No. C-18, the forebay was unwatered and a defective section of concrete was repaired. When the forebay was unwatered the turbines were inspected and a total of sixteen broken gates were replaced. The defective wooden railing above the racks was replaced by a pipe railing. Three defective sections of the clay-tile power-house roof were replaced by galvanized iron tile.

At Fenelon Falls, plant No. C-30, the exciter turbine was unwatered and the broken regulating ring and quadrant gear were replaced. Eighteen defective coils were replaced in one of the 400-kv-a generators following a failure while in service. The stone wall on the river side of the forebay was repaired.

At Galetta generating station on the Mississippi river, a section of the east forebay wall approximately 120 feet in length collapsed under the pressure of the spring freshet on March 31. This section of wall was completely rebuilt, and the remaining section was reinforced and repaired. Following this failure a program of general plant rehabilitation was carried out. All hydraulic and electrical equipment was overhauled. A bank of three, 400-kv-a, 2,200/33,000-volt transformers was installed on a concrete pad on the station property in order to make the total capacity of the plant directly available to the 33,000-volt line.

At Calabogie generating station on the Madawaska river, the main turbines were completely overhauled. A number of defective bolts were replaced in the regulating rings and gate links of each unit. The turbine bearings were all adjusted. Two double booms were installed across the forebay in order to eliminate, as far as possible, difficulties which have been experienced due to the breaking up of the forebay ice cover when the daily output of the plant is varied over a wide range. Steel stop-log checks were installed in all five sluices of the South Branch dam. Timber stringers, decking and railings on the dam were entirely renewed, and all surfaces creosoted. New stop logs were framed and placed in the new checks. A new steel and timber bulkhead was constructed in the opening originally provided for a third unit.

Municipal, Distributing and Switching Stations

At Auburn switching station, three-phase, gang-operated grounding switches were installed on the three 44,000-volt lines.

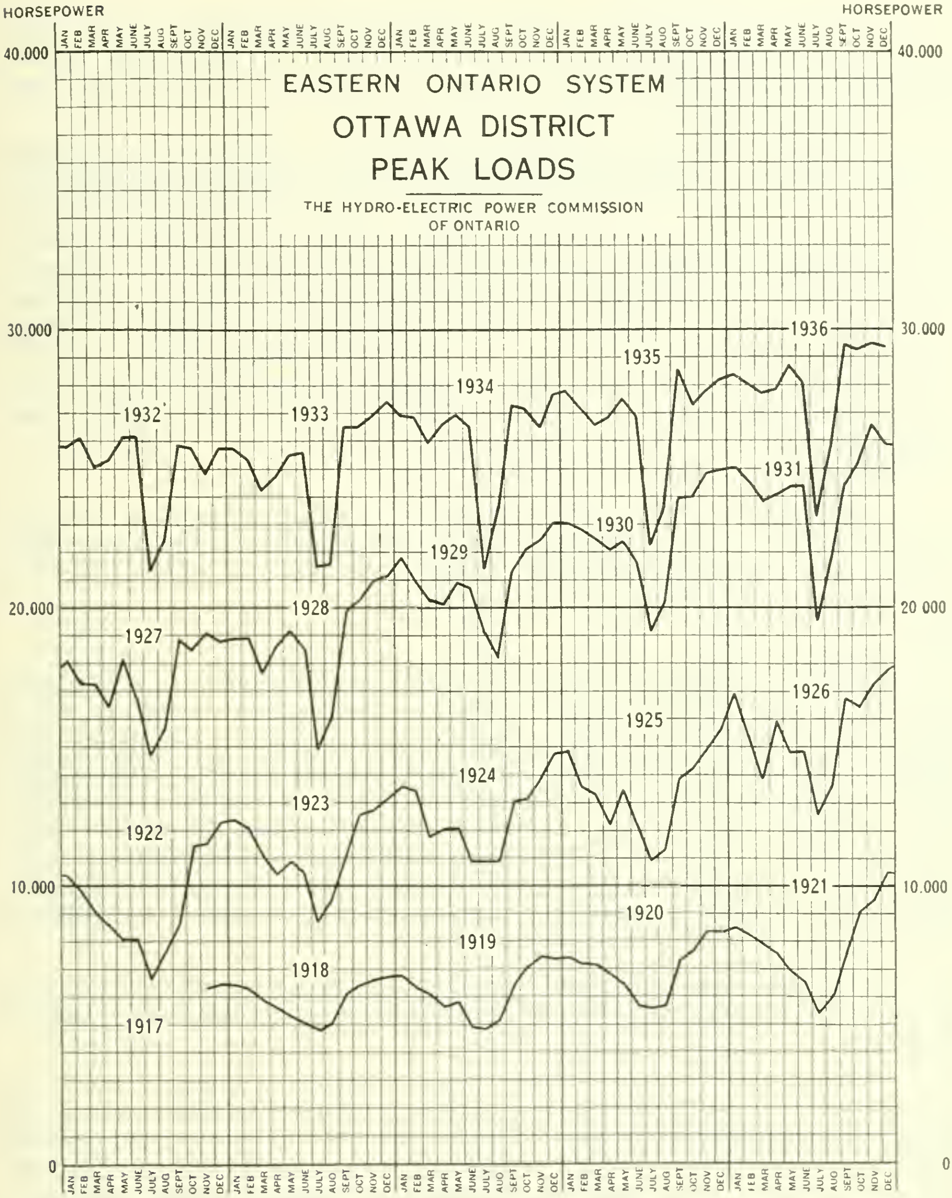
At Bowmanville distributing station, in order to meet increasing load demand, a third 750-kv-a, three-phase, 44,000/4,160-volt transformer was installed and placed in service on June 15. A new 24-volt battery was installed replacing the defective battery.

At Belleville distributing station, one of the 750-kv-a transformers was replaced with a 1,500-kv-a, three-phase, 44,000/2,400-volt transformer on October 11 in order to meet increasing load demand in that district. Reactors were installed on the secondary side of the other transformers for load balancing purposes.

At Cornwall transformer station, new relays were installed on the 110,000-volt and 44,000-volt lines.

At Kingston distributing station, due to increased load demand, one of the 750-kv-a transformers was replaced with a 1,500-kv-a, three-phase, 44,000/2,400-volt transformer on May 16.

At Oshawa No. 1 distributing station, due to increased load demand in that district, the transformer capacity was increased to 9,000-kv-a, by replacing one of the 1,500-kv-a transformers with a 3,000-kv-a transformer. The low-tension oil breaker and current transformers associated with this



bank were also replaced. As a result of increased load conditions, current transformers were replaced on three other circuits.

At Oshawa No. 2 distributing station all low-tension equipment was completely overhauled and barriers installed between feeder disconnecting switches. An improved type of air-break switch was installed on the incoming and outgoing 44,000-volt lines.

At Perth distributing station a defective high-tension bushing was replaced in one of the 750-kv-a transformers. A defective pothead was replaced on the low-tension cable.

At Sidney transformer station, ground disconnecting switches were installed on all outgoing 6,600-volt feeders. A new 120-volt storage battery and mounting rack was installed, replacing the old battery which had been in service for 25 years.

At Smiths Falls transformer station, a new 3,000-kv-a, three-phase, 44,000/2,400-volt transformer was installed in the tertiary bank in order to facilitate the transfer of a maximum amount of power to or from any of the interconnected sources. The capacity of the tertiary bank is now 4,500 kv-a. The 1,500-kv-a transformer in the tertiary bank failed in service during a severe electrical storm on August 23, and was returned to service on October 14 following the replacement of a section of one of the high-voltage windings. During an electrical storm on July 13, two high-tension bushings failed in the 750-kv-a transformer and were replaced. At the same time, an air-insulated current transformer on the 44,000-volt side of the tertiary transformer bank broke down and was removed from service, rebuilt and re-installed at a later date.

At Williamsburg an entirely new outdoor substation of steel construction was placed in service on August 2. The two 100-kv-a, single-phase transformers which formerly served this district were replaced with a 300-kv-a, three-phase, 44,000/4,160-volt transformer.

High-Voltage Lines

An active program of transmission line maintenance was carried out during the year. Approximately 10,000 insulators were tested, of which approximately 2,300 were found defective and replaced. 272 poles were stubbed, and 157 poles were replaced due to rot at the ground line. Sand-creosote collars were installed on 2,082 poles. A number of defective 44,000-volt air-break switches were replaced. Severe storms during the early months of the year caused considerable damage to the high-tension lines, particularly in the Central Ontario, St. Lawrence and Madawaska districts. During a severe wind storm in the vicinity of Perth on July 9, a number of poles were broken off at the ground line.

On October 29 a wind storm of cyclonic proportions broke off thirteen poles on the 44,000-volt Belleville-Kingston tie line immediately east of Napanee.

A considerable number of poles were relocated at different points on the system as a result of highway changes. Due to erosion of the canal bank west of Morrisburg, a total of twelve poles had to be relocated. Seven poles were moved in the town of Brockville due to street widening. Approximately half-a-mile of 44,000-volt line south of Maxville, which was set in soft ground and had several bad corners, was relocated, making a much stronger line. Routine maintenance work was carried out, including straightening poles, adjusting guys, tightening bolts, etc. Tree trimming, weed cutting and underbrushing were carried out on numerous high-voltage and low-voltage line sections.

Meter Department and Repair Shops—Belleville

The usual program of routine work in connection with the maintenance of metering and relay equipment was carried out by the Meter department. Fifty-six new station watthour meter installations were inspected and checked into service, and 174 metering equipments for municipal customers in various parts of the system were inspected.

Special tests relating to radio and telephone interference, ground conductivity and voltage conditions were made at numerous points on the system. The services of this department are available on request to any municipality wanting electrical measurements made, meter installations checked, or technical problems investigated.

The Belleville machine and meter repair shop continued to test and repair service meters for municipal and rural systems. 2,836 meters were repaired and 1,428 new meters handled. Approximately 500 samples of oil received from the field were tested during the year.

EASTERN ONTARIO SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36

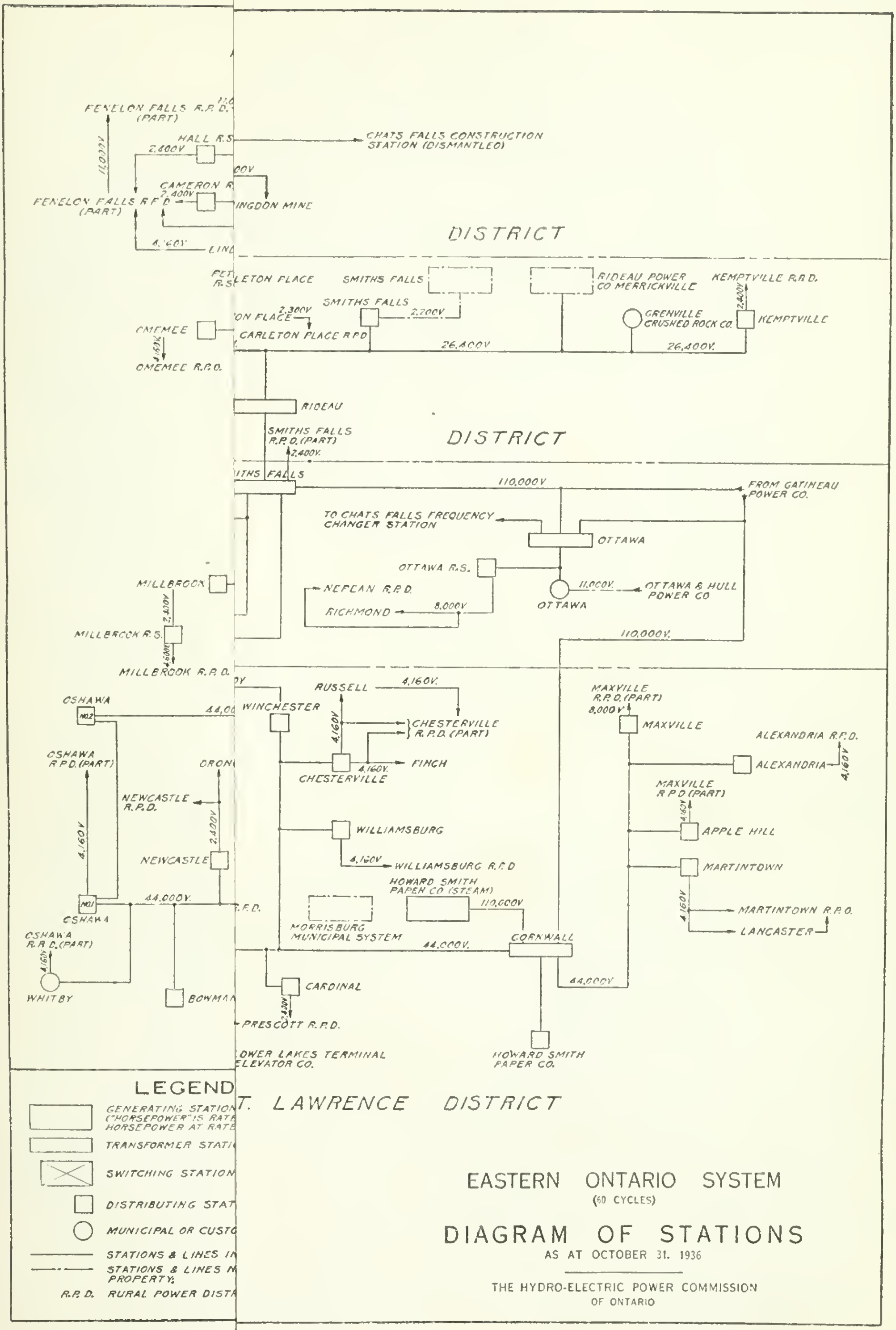
Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Alexandria	207.4	207.1	205.3	1.8	
Apple Hill	30.3	31.9	36.2		4.3
Athens	74.4	77.7	102.1		24.4
Bath	27.3	27.8	26.8	1.0	
Belleville	3,866.9	4,235.0	5,092.0		857.0
Bloomfield	76.3	76.5	86.6		10.1
Bowmanville	1,688.1	1,765.8	1,972.3		206.5
Brighton	267.8	274.0	284.2		10.2
Brockville	2,497.3	2,628.6	2,991.9		363.3
Cardinal	148.4	154.1	180.8		26.7
Carleton Place	1,014.7	1,288.8	1,257.3	31.5	
Chesterville	170.1	230.5	245.0		14.5
Cobden		53.6	60.3		6.7
Cobourg	1,317.7	1,396.8	1,423.5		26.7
Colborne	137.0	133.5	148.1		14.6
Deseronto	126.6	131.8	135.4		3.6
Finch	43.5	53.5	59.7		6.2
Hastings	87.4	85.9	87.0		1.1
Havelock	126.1	117.5	146.8		29.3
Kemptville	272.1	290.8	361.9		71.1
Kingston	5,921.3	6,478.5	7,512.3		1,033.8
Lakefield	206.1	233.7	256.0		22.3
Lanark	79.0	74.8	82.3		7.5
Lancaster	36.0	47.2	44.0	3.2	
Lindsay	1,866.1	1,913.0	2,170.0		257.0
Madoc	146.6	161.6	165.4		3.8
Marmora	94.2	93.3	101.7		8.4
Martintown	22.5	25.3	32.8		7.5
Maxville	73.4	87.1	83.6	3.5	
Millbrook	76.5	66.5	57.9	8.6	
Napanee	953.2	1,043.6	1,095.9		52.3
Newburgh	39.5	40.1	35.9	4.2	
Newcastle	102.5	109.1	109.6		0.5
Norwood	102.0	95.2	93.2	2.0	
Omemee	102.0	128.8	137.7		8.9

EASTERN ONTARIO SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36 —Concluded

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Orono	74.9	76.7	92.0		15.3
Oshawa	8,859.2	12,690.2	11,391.4	1,298.8	
Ottawa	26,954.1	26,869.9	28,751.7		1,881.8
Perth	1,139.4	1,254.1	1,364.0		109.9
Peterborough	6,095.3	7,140.3	7,700.0		559.7
Picton	868.7	864.3	925.7		61.4
Port Hope	1,178.6	1,358.4	1,319.7	38.7	
Prescott	705.8	758.1	890.0		131.9
Richmond	47.7	45.5	41.5	4.0	
Russell	41.3	42.4	46.9		4.5
Smiths Falls	1,549.6	1,626.1	1,765.3		139.2
Stirling	243.9	257.3	255.3	2.0	
Trenton	2,948.5	2,985.3	3,029.6		44.3
Tweed	165.8	162.7	194.6		31.9
Warkworth	64.9	63.8	70.7		6.9
Wellington	199.7	177.4	178.4		1.0
Westport	68.3	69.9	77.2		7.3
Whitby	994.6	966.5	991.9		25.4
Williamsburg	212.4	236.8	218.5	18.3	
Winchester	213.2	234.8	265.3		30.5

EASTERN ONTARIO SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36

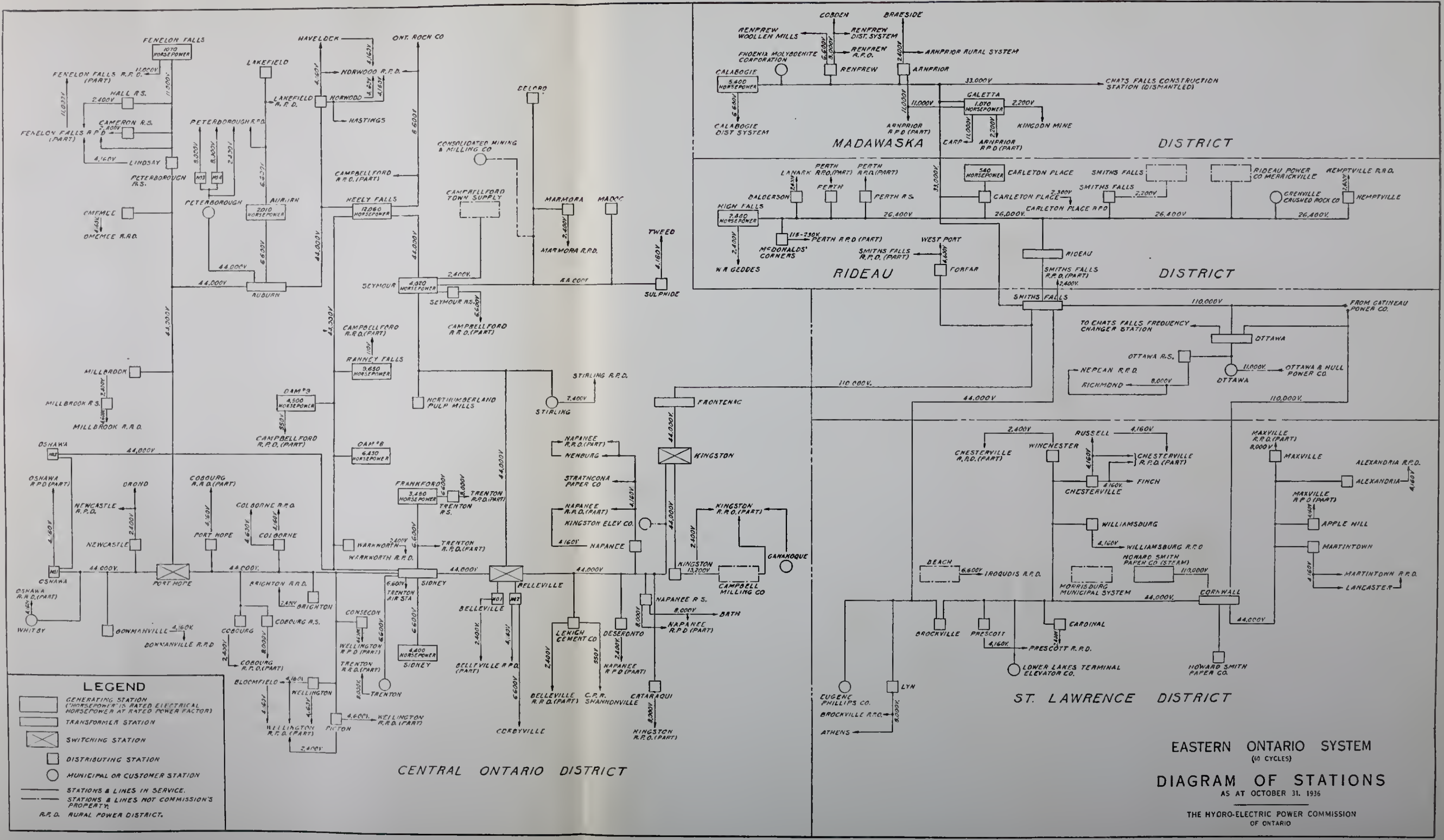
Rural power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Alexandria	31.0	33.2	35.3		2.1
Belleville	310.8	347.4	391.7		44.3
Bowmanville	102.7	112.2	114.7		2.5
Brighton	22.8	23.3	23.3		
Brockville	278.1	325.8	340.5		14.7
Campbellford	65.6	57.7	81.0		23.3
Chesterville	170.1	199.1	269.3		70.2
Cobourg	279.1	303.0	325.6		22.6
Colborne	97.8	92.0	107.7		15.7
Fenelon Falls	65.3	122.8	165.6		42.8
Iroquois	408.8	453.0	502.7		49.7
Kemptville	20.7	25.0	26.8		1.8
Kingston	360.7	408.0	527.6		119.6
Lakefield	39.6	47.2	62.1		14.9
Martintown	51.8	69.4	73.3		3.9
Maxville	157.4	170.8	197.7		26.9
Millbrook	42.1	45.4	52.0		6.6
Napanee	211.1	219.5	256.1		36.6
Nepean	582.3	635.4	762.8		127.4
Newcastle	63.4	66.9	63.4	3.5	


FENELON FALLS R.P.D. (PART)
HALL R.S.
2,400V
11,000V
CHATS FALLS CONSTRUCTION STATION (DISMANTLED)
CAMERON R
2,400V
FENELON FALLS R.P.D. (PART)
INGDON MINE
4,160V
LIN
DISTRICT
R.S
LETON PLACE
SMITHS FALLS
RIDEAU POWER CO MERRICKVILLE
KEMPTVILLE R.P.D.
2,400V
KEMPTVILLE
SMITHS FALLS
2,300V
2,200V
ON PLACE
CARLETON PLACE R.P.D.
GRENVILLE CRUSHED ROCK CO.
OMEMEE
OMEMEE R.P.D.
26,400V
26,400V.
RIDEAU
SMITHS FALLS R.P.D. (PART)
2,400V.
DISTRICT
ITHS FALLS
110,000V
FROM GATINEAU POWER CO.
TO CHATS FALLS FREQUENCY CHANGER STATION
OTTAWA
OTTAWA R.S.
MILLBROOK
NEPEAN R.P.D.
11,000V.
OTTAWA & HULL POWER CO
RICHMOND
8,000V
OTTAWA
MILLBROOK R.S.
2,400V
4,800V
110,000V.
MILLBROOK R.P.D.
RUSSELL
4,160V.
MAXVILLE R.P.D. (PART)
8,000V
OSHAWA
NO.2
44,00
WINCHESTER
CHESTERVILLE R.P.D. (PART)
MAXVILLE
ALEXANDRIA R.P.D.
4,160V
ALEXANDRIA
4,160V
OSHAWA R.P.D. (PART)
ORONO
4,160V.
FINCH
CHESTERVILLE
MAXVILLE R.P.D (PART)
NEWCASTLE R.P.D.
2,400V
4,160V
4,160V
APPLE HILL
WILLIAMSBURG
NEWCASTLE
4,160V
WILLIAMSBURG R.P.D
MARTINTOWN
HOWARD SMITH PAPER CO (STEAM)
NO.1
44,000V.
P.D.
110,000V
4,160V
MARTINTOWN R.P.D.
OSHAWA
MORRISBURG MUNICIPAL SYSTEM
LANCASTER
OSHAWA R.P.D. (PART)
44,000V.
CORNWALL
4,160V
44,000V
CARDINAL
WHITBY
BOWMAN
2,300V
PRESCOTT R.P.D.
LOWER LAKES TERMINAL ELEVATOR CO.
HOWARD SMITH PAPER CO.
LEGEND
GENERATING STATION ("HORSEPOWER" IS RATE HORSEPOWER AT RATE
TRANSFORMER STATI
SWITCHING STATION
DISTRIBUTING STAT
MUNICIPAL OR CUSTO
STATIONS & LINES IN
STATIONS & LINES N PROPERTY.
R.P.D. RURAL POWER DISTR
T. LAWRENCE DISTRICT

EASTERN ONTARIO SYSTEM
(60 CYCLES)

DIAGRAM OF STATIONS
AS AT OCTOBER 31, 1936

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO



FENELON FALLS
1070 HORSEPOWER
FENELON FALLS R.P.D. (PART)
HALL R.S.
CAMERON R.S.
FENELON FALLS R.P.D. (PART)
LINDSAY
PETERBOROUGH R.S.
PETERBOROUGH R.P.D.
PETERBOROUGH
AUBURN
2010 HORSEPOWER
LAKEFIELD
LAKEFIELD R.P.D.
HAVELOCK
NORWOOD R.P.D.
NORWOOD
HASTINGS
ONT. ROCK CO
OMEMEE
OMEMEE R.P.D.
CAMPBELLFORD R.P.D. (PART)
HEELY FALLS
12,060 HORSEPOWER
DELORO
CONSOLIDATED MINING & MILLING CO
CAMPBELLFORD TOWN SUPPLY
MARMORA
MARMORA R.P.D.
MADOC
TWEED
SULPHIDE
SEYMOUR
4,920 HORSEPOWER
SEYMOUR R.S.
CAMPBELLFORD R.P.D. (PART)
RANNEY FALLS
9,650 HORSEPOWER
DAM No 9
4,500 HORSEPOWER
DAM No 8
6,430 HORSEPOWER
MILLBROOK
MILLBROOK R.S.
MILLBROOK R.P.D.
NORTHUMBERLAND PULP MILLS
STIRLING
STIRLING R.P.D.
OSHAWA
OSHAWA R.P.D. (PART)
WHITBY
ORONO
NEWCASTLE R.P.D.
NEWCASTLE
BOWMANVILLE
BOWMANVILLE R.P.D.
COBOURG R.P.D. (PART)
PORT HOPE
COLBORNE R.P.D.
COLBORNE
BRIGHTON R.P.D.
BRIGHTON
COBOURG
COBOURG R.S.
COBOURG R.P.D. (PART)
FRANKFORD
3,480 HORSEPOWER
TRENTON R.S.
TRENTON R.P.D. (PART)
WARKWORTH
WARKWORTH R.P.D.
SIDNEY
TRENTON AIR STA
4,400 HORSEPOWER
CONSECON
WELLINGTON R.P.D. (PART)
TRENTON
BLOOMFIELD
WELLINGTON
PICTON
BELLEVILLE
BELLEVILLE R.P.D. (PART)
CORBYVILLE
LEHIGH CEMENT CO
DESERONTO
BELLEVILLE R.P.D. (PART)
C.P.R. SHANNONVILLE
NAPANEE R.P.D. (PART)
NEWBURG
STRATHCONA PAPER CO
KINGSTON ELEV CO.
NAPANEE
NAPANEE R.S.
BATH
CATARAQUI
KINGSTON R.P.D. (PART)
FRONTENAC
KINGSTON
CAMPBELL MILLING CO
GANANOQUE
44,000V
110,000V
CENTRAL ONTARIO DISTRICT
COBDEN
BRAESIDE
RENFREW WOOLLEN MILLS
RENFREW DIST. SYSTEM
RENFREW R.P.D.
PHOENIX MOLYBDENITE CORPORATION
RENFREW
ARNPRIOR
ARNPRIOR RURAL SYSTEM
CALABOGIE
5,400 HORSEPOWER
CALABOGIE DIST SYSTEM
CHATS FALLS CONSTRUCTION STATION (DISMANTLED)
GALETTA
1,070 HORSEPOWER
KINGDON MINE
ARNPRIOR R.P.D. (PART)
CARP
MADAWASKA DISTRICT
LANARK
PERTH R.P.D. (PART)
PERTH
BALDERSON
PERTH R.S.
HIGH FALLS
2,400 HORSEPOWER
McDONALDS' CORNERS
W.A. GEDDES
540 HORSEPOWER
CARLETON PLACE
CARLETON PLACE R.P.D.
SMITHS FALLS
RIDEAU POWER CO MERRICKVILLE
KEMPTVILLE R.P.D.
GRENVILLE CRUSHED ROCK CO
KEMPTVILLE
WEST PORT
SMITHS FALLS R.P.D. (PART)
FORFAR
RIDEAU
RIDEAU DISTRICT
FROM GATINEAU POWER CO.
TO CHATS FALLS FREQUENCY CHANGER STATION
OTTAWA
OTTAWA R.S.
NEPEAN R.P.D.
RICHMOND
OTTAWA & HULL POWER CO.
RUSSELL
WINCHESTER
CHESTERVILLE R.P.D. (PART)
CHESTERVILLE
FINCH
WILLIAMSBURG
WILLIAMSBURG R.P.D.
MAXVILLE R.P.D. (PART)
MAXVILLE
ALEXANDRIA R.P.D.
ALEXANDRIA
APPLE HILL
MARTINTOWN
MARTINTOWN R.P.D.
LANCASTER
BEACH
IROQUOIS R.P.D.
MORRISBURG MUNICIPAL SYSTEM
HOWARD SMITH PAPER CO (STEAM)
CORNWALL
BROCKVILLE
PRESCOTT
CARDINAL
PRESCOTT R.P.D.
LOWER LAKES TERMINAL ELEVATOR CO.
HOWARD SMITH PAPER CO.
EUGENE PHILLIPS CO.
LYN
BROCKVILLE R.P.D.
ATHENS
ST. LAWRENCE DISTRICT
LEGEND
GENERATING STATION ("HORSEPOWER" IS RATED ELECTRICAL HORSEPOWER AT RATED POWER FACTOR)
TRANSFORMER STATION
SWITCHING STATION
DISTRIBUTING STATION
MUNICIPAL OR CUSTOMER STATION
STATIONS & LINES IN SERVICE.
STATIONS & LINES NOT COMMISSION'S PROPERTY.
R.P.D. RURAL POWER DISTRICT.

EASTERN ONTARIO SYSTEM
(60 CYCLES)

DIAGRAM OF STATIONS
AS AT OCTOBER 31, 1936

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

EASTERN ONTARIO SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36 —Concluded

Rural power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Norwood	19.8	24.4	22.0	2.4	
Omemee	4.8	4.8	5.0		0.2
Oshawa	727.8	821.6	903.1		81.5
Perth	26.8	25.8	32.6		6.8
Peterborough	438.8	456.0	500.8		44.8
Prescott	116.6	138.0	134.2	3.8	
Stirling	50.5	51.7	49.6	2.1	
Smiths Falls	156.1	176.1	234.9		58.8
Trenton	209.3	238.1	107.6	130.5	
Warkworth	3.0	3.6	3.8		0.2
Wellington	173.8	244.7	245.3		0.6
Williamsburg	82.8	86.4	98.8		12.4

EASTERN ONTARIO SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36

Rural power district	Date connected	Initial load	Oct. 1936	Change in load	
				Decrease	Increase
Marmora	July 1, 1936	3.3	1.5	1.8	

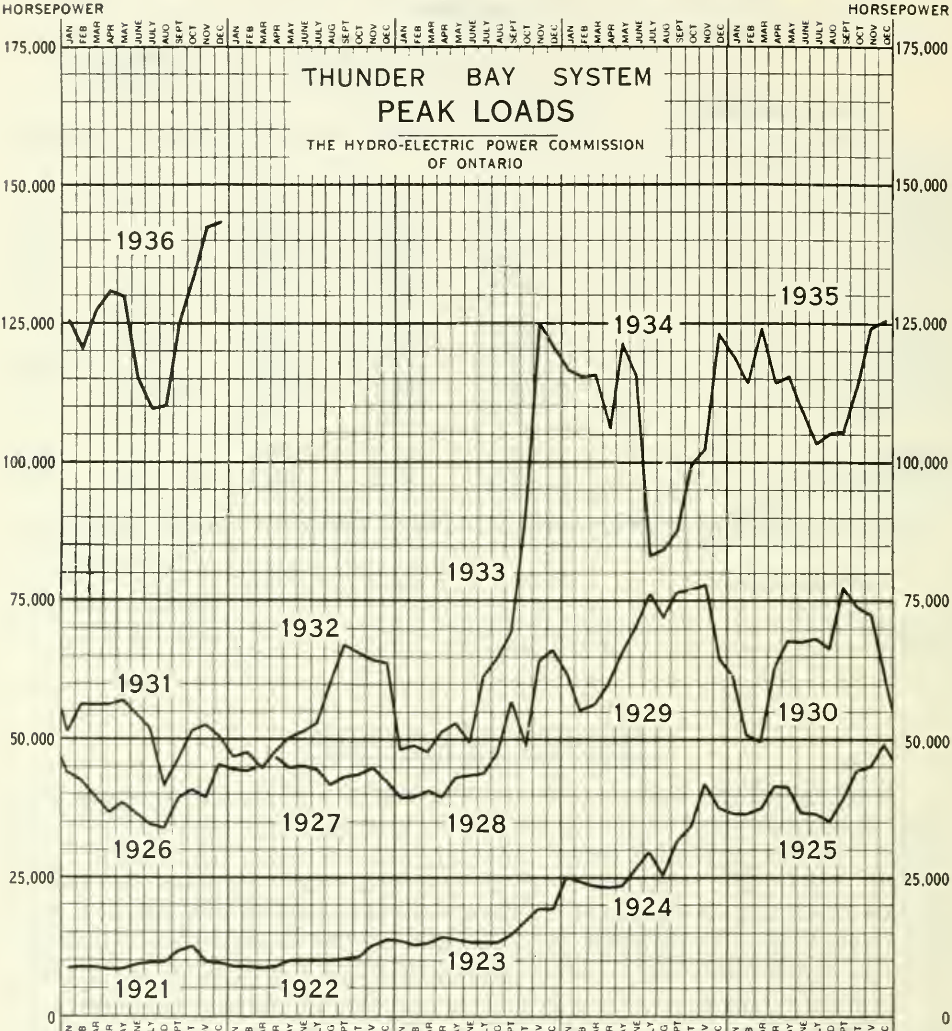
THUNDER BAY SYSTEM

The load on the Thunder Bay system increased over the previous year. While a large amount of power was again sold for the generation of steam (utilized in the pulp and paper industry) the increase was mainly in the primary load. The average load generated for all purposes showed an increase of 13 per cent and the average monthly peak an increase of 9.8 per cent over 1935. The highest load demand on the system was in October, when the maximum twenty-minute peak generated was 134,000 horsepower.

Two new customers were added to the system during the year. On May 30 the substation of the Sand River Gold Mines was placed in service and on June 20 the Leitch Gold Mines substation. Power is supplied to these stations over their 44,000-volt transmission lines which connect to the line of the Northern Empire Mines at Empire.

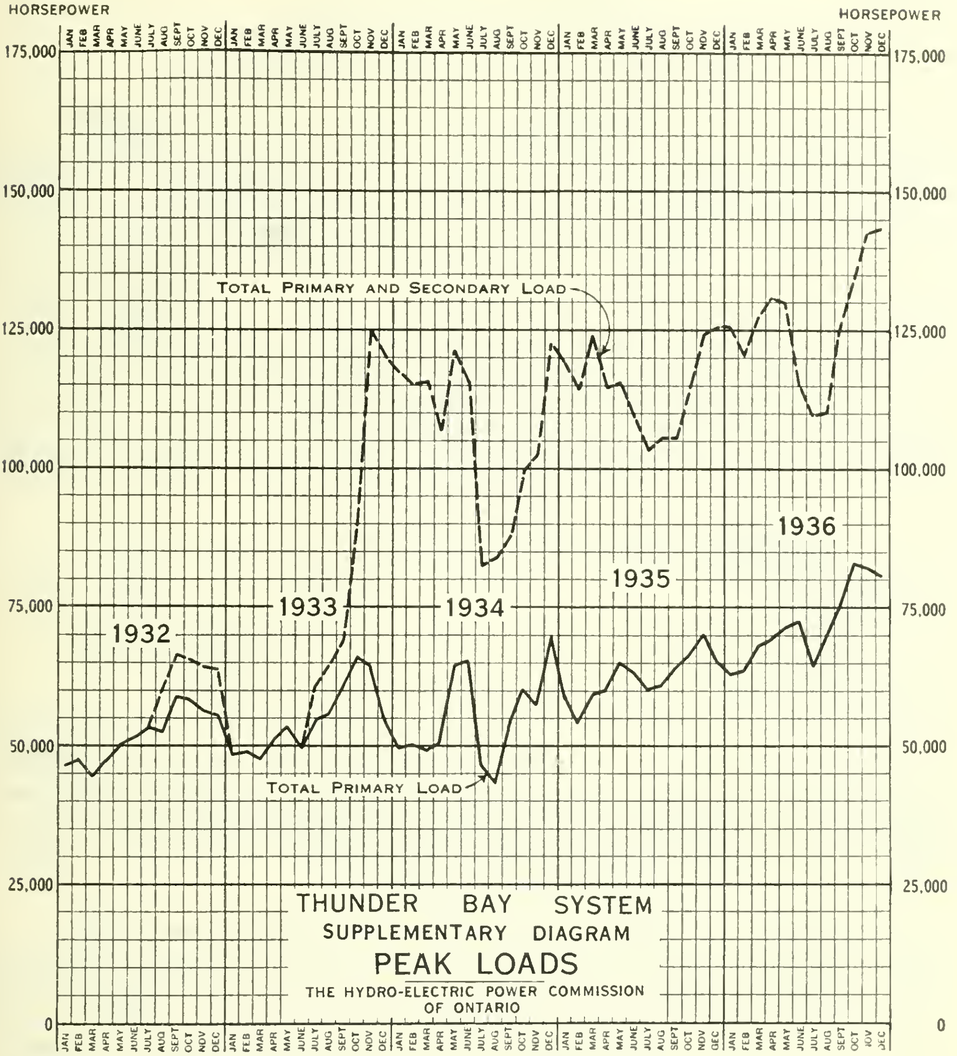
The Kaministiquia Power Company was in parallel with the system during certain periods of the year. This parallel was made through the interconnecting switch on number 1053 feeder near Fort William transformer station. This method of operation was adopted at the request of the Abitibi Power and Paper Company, in order to augment the system capacity to such an extent that it would not be necessary to reduce the load on the electric steam generator at the Thunder Bay Paper Company during peak periods.

There was no restriction of primary power supply, or serious interruptions of service to any customer. It was necessary on occasions to restrict the secondary load demands of certain customers for short periods in order to carry the system load with satisfactory frequency and voltage.



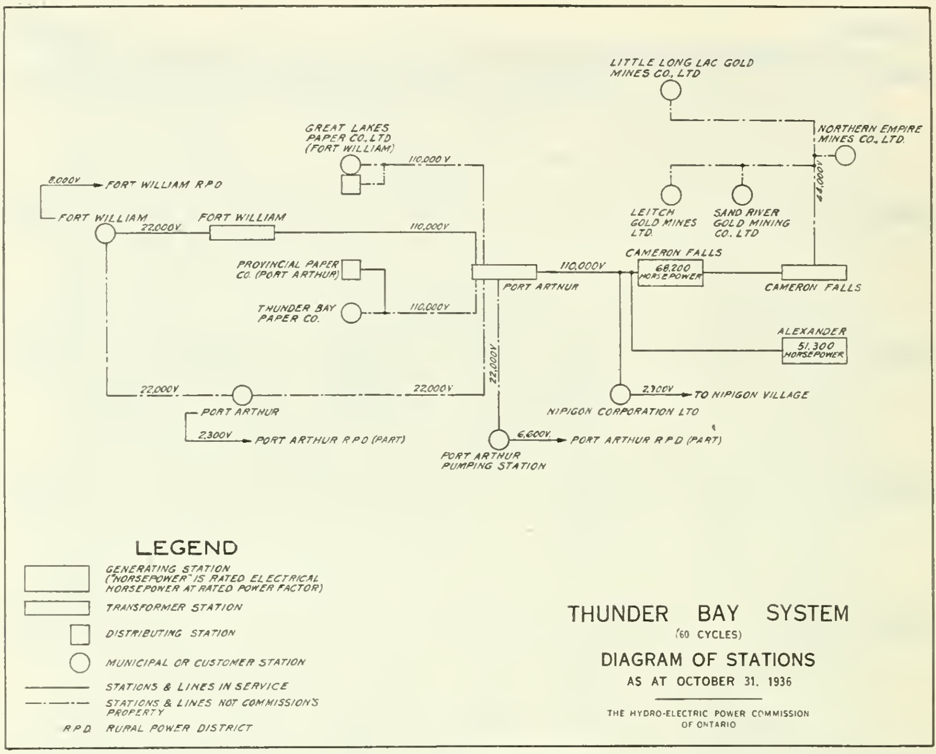
The generating stations, transformer stations, and transmission lines all functioned reliably and satisfactorily throughout the year. No repairs of major importance were necessary to the generating units at either the Cameron Falls or Alexander generating stations. Routine maintenance work was carried on as opportunity offered, that is, when the load permitted individual units to be temporarily released from service. Considerable maintenance work was carried out on the power transformers and oil circuit-breakers at the generating stations and also at Port Arthur and Fort William transformer stations.

One 8,000-kv-a transformer at Cameron Falls generating station failed in service on October 11, due to carbonizing of the core bolt insulation. This transformer was dismantled, and a new core was supplied by the manufac-



turer. During the extremely hot weather in July there were four bushing failures on the 110,000-volt oil circuit-breakers at Cameron Falls generating station. At Cameron Falls transformer station a bank of three 44,000/12,000-volt, 1,500-kv-a transformers was placed in service on February 15, replacing the three 33,000/12,000-volt, 400-kv-a units supplying the mining customers in the Beardmore-Long Lac area.

Very little trouble was encountered with the 110,000-volt transmission lines system. There were a number of flashovers during electrical storms, causing interruptions of short duration to one or more customers, but in no case was there a total system interruption. Special attention was again given to the testing of insulators and the replacement of those found defective, and to the maintenance of poles and conductors.


LITTLE LONG LAC GOLD MINES CO. LTD
NORTHERN EMPIRE MINES CO. LTD.
44,000V
GREAT LAKES PAPER CO. LTD (FORT WILLIAM)
110,000 V
8,000V
FORT WILLIAM R.P.D
FORT WILLIAM
22,000V
FORT WILLIAM
110,000V
LEITCH GOLD MINES LTD.
SAND RIVER GOLD MINING CO. LTD
CAMERON FALLS
68,200 HORSEPOWER
CAMERON FALLS
PROVINCIAL PAPER CO. (PORT ARTHUR)
110,000V
PORT ARTHUR
THUNDER BAY PAPER CO.
110,000V
ALEXANDER
51,300 HORSEPOWER
22,000V
22,000V
22,000V
2,300V
TO NIPIGON VILLAGE
PORT ARTHUR
NIPIGON CORPORATION LTD
2,300V
PORT ARTHUR R.P.D (PART)
6,600V.
PORT ARTHUR R.P.D (PART)
PORT ARTHUR PUMPING STATION
LEGEND
GENERATING STATION ("HORSEPOWER" IS RATED ELECTRICAL HORSEPOWER AT RATED POWER FACTOR)
TRANSFORMER STATION
DISTRIBUTING STATION
MUNICIPAL OR CUSTOMER STATION
STATIONS & LINES IN SERVICE
STATIONS & LINES NOT COMMISSION'S PROPERTY
R.P.D. RURAL POWER DISTRICT

THUNDER BAY SYSTEM
(60 CYCLES)
DIAGRAM OF STATIONS
AS AT OCTOBER 31, 1936
THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

The precipitation in the watershed supplying this system was about average, 23 inches being recorded. A considerable amount of water was wasted during the spring run-off, and with the high river flow required as a result of the increased load the level of lake Nipigon was reduced to 851.3, which is about two feet less than a year ago.

THUNDER BAY SYSTEM—LOADS OF MUNICIPALITIES, 1934-35-36

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Fort William	10,835.8	10,740.0	10,678.3	61.7	
Nipigon Township	105.1	112.5	124.6		12.1
Port Arthur	26,251.5	34,396.3	42,407.2		8,010.9

THUNDER BAY SYSTEM—RURAL POWER DISTRICT LOADS, 1934-35-36

Rural power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Fort William	83.7	111.2	130.0		18.8
Port Arthur	37.5	47.0	49.6		2.6

MANITOULIN DISTRICT

Supplying Power to the

MANITOULIN RURAL POWER DISTRICT

Operation of the Manitoulin district throughout the year was satisfactory. Four total district interruptions, totalling 4 hours 2 minutes, were required by the Manitoulin Pulp Company to permit repairs to generating equipment, and six interruptions, totalling 8 hours 1 minute, were required by the Commission to locate and correct equipment failures in the Kagawong distributing station.

On September 11, 1936, one high-tension bushing on one of the three 100-kv-a transformers in Kagawong distributing station failed in service. The bushing was removed, repaired and returned to service. On October 11, 1936, the lightning arrester on one phase of the outgoing line at Kagawong distributing station failed and was removed from service. During the interruption required for this work the repaired transformer bushing was replaced by a new bushing. Both failures were caused by lightning surges.

MANITOULIN RURAL POWER DISTRICT LOADS, 1934-35-36

Rural power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
Manitoulin	87.9	113.9	138.4		24.5

NORTHERN ONTARIO PROPERTIES

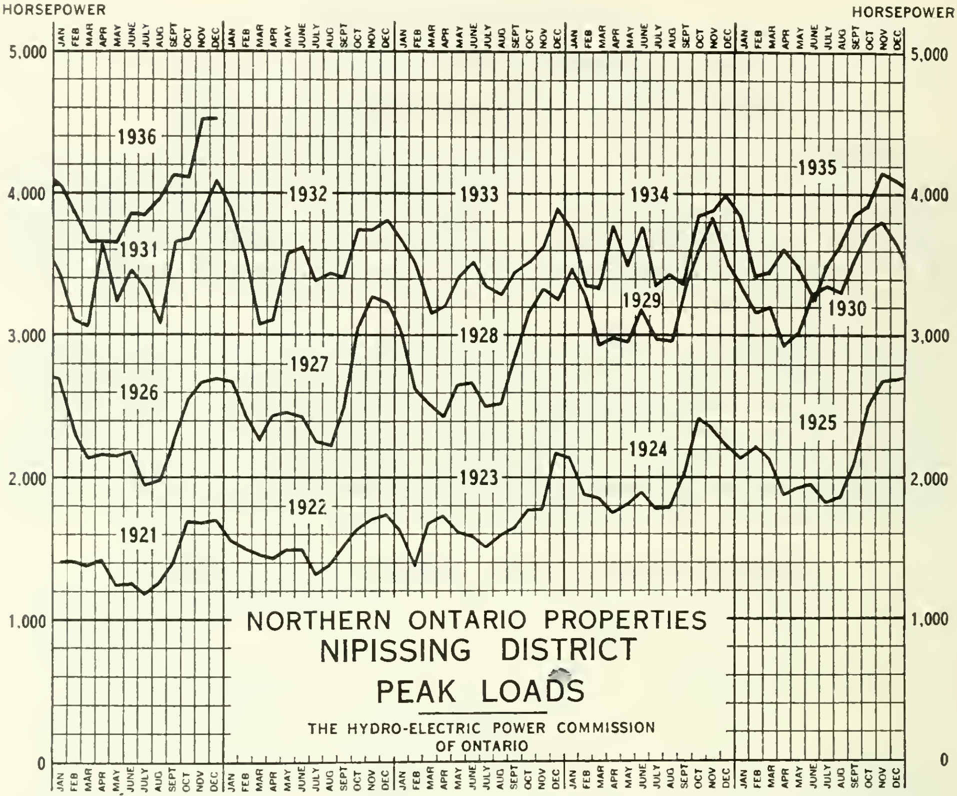
Nipissing District

Water storage and river flow conditions were satisfactory throughout the year, and no special difficulties were experienced in the operation of this district. The usual schedule of inspection and testing of equipment and lines has been followed. No serious failures were experienced, and all equipment was maintained in good operating condition. An outline of the maintenance work performed is given in the following paragraphs.

Generating Stations

At Nipissing generating station the wood-stave pipe line was inspected. One hundred steel plates with tarred felt pads were placed over leaky butt joints, bench sills were replaced where decay was developing, and the drainage was improved. The exposed steel parts of the surge tank and its wooden housing were scraped and painted. Some road work was done on the road into the generating station. The pole line from the power house to the main dam was rehabilitated, the conductor, ten poles, eight crossarms, and ten insulators being replaced.

At Bingham Chute generating station the turbines were inspected and new lignum vitae linings installed in the bearings. Ebony asbestos barriers



were installed between the disconnecting switches at the back of the switchboard. Additional earth and gravel were placed on the dams.

At Elliott Chute generating station the turbine was completely overhauled, new gate bolts and link pins being installed, a crack in the draft tube liner repaired by welding, and the turbine and draft tube painted with red lead. Gravel and rip-rap were placed on the main dam. The oil breakers were inspected and burned contacts replaced. Work was done on the diverted roads around the storage basin.

Transformer and Distributing Stations

At North Bay distributing station No. 1, two bushings on the 22,000-volt oil breaker failed and were replaced. The breaker was overhauled, bushings replaced, and contact fingers replaced or adjusted. The roof was covered with two layers of felt and gravel.

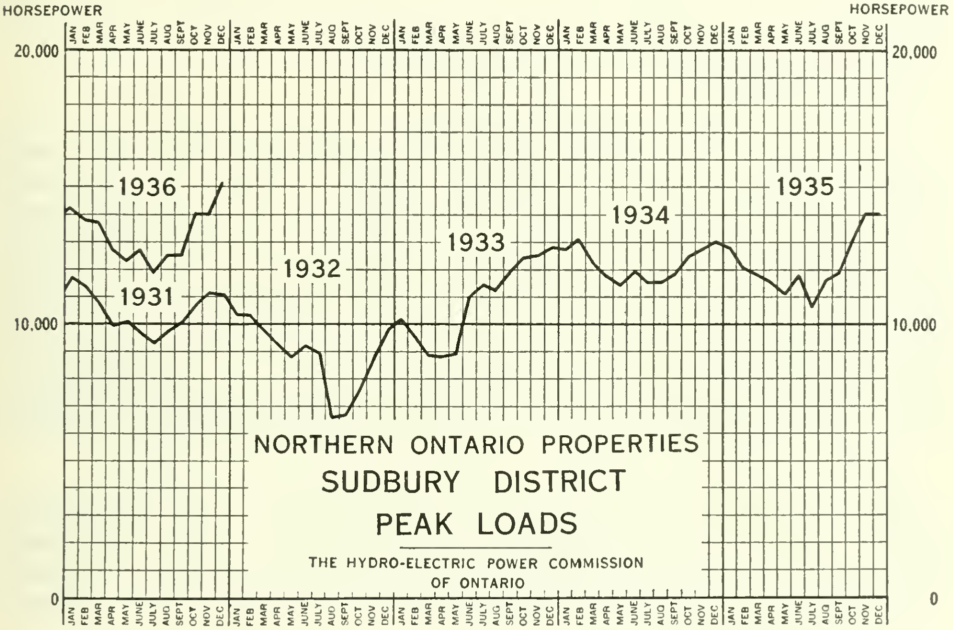
At North Bay distributing station No. 2, the 22,000-volt lightning arrester and choke coils were inspected and minor repairs made.

Transmission Lines

On the 22,000-volt lines 41 poles were stubbed, and sand-creosote collars applied to eleven. Inspection was made of insulators, insulator pins, crossarms, guys, and pole fittings, 223 insulators being replaced and other repairs made where required. A considerable number of the insulators replaced appeared to have been broken by rifle bullets or stones. On the 2,200-volt line from Nipissing generating station to Nipissing village 16 poles were replaced.

Storage Dam

In order to store as much as possible of the spring run-off, and maintain stream flow at the generating stations throughout the summer and autumn, maintenance work was carried out at the dams at Braie, Craig, Clear, Gull and Surprise lakes, rock and earth-fill being placed on the dams, and new stop logs purchased and framed. Underbrush was cut on seventeen miles of road into Craig dam, culverts repaired and a corduroy section of the road rebuilt.



Sudbury District

River flow and water storage conditions in the Sudbury district were satisfactory throughout the year.

On July 24 McVittie generating station was removed from service and released to the Construction department for the reconstruction of the concrete headworks and the construction of a new main dam. This work was sufficiently completed to permit the return to service of the station on October 2. Deepening the tail race during the shut-down resulted in an increase in plant capacity of approximately 10 per cent.

On September 10 a fire occurred at the Stinson generating station, and all equipment was damaged to such an extent that the station had to be completely removed from service. Reconstruction of the station was undertaken immediately, and No. 2 unit was completely repaired and returned to service on October 15. Repairs to the remaining unit were completed and the unit returned to service on October 31. Following the fire, with both

McVittie and Stinson generating stations unavailable for service, it was necessary to curtail the power supply to certain customers in the district until September 20, when arrangements were completed for a temporary supplementary supply from the Espanola plant of the Abitibi Power and Paper Company.

During the summer the capacity of the line between Stinson and Coniston generating stations was increased by restringing with larger conductor, the original line having insufficient capacity to permit utilizing the full capacity of the Stinson generating station.

A new 6,000-kv-a outdoor-type distributing station was constructed at Sudbury, and was placed in service on August 11, replacing the old indoor-type station which was of obsolete design and had insufficient three-phase capacity.

Generating Stations

At Coniston generating station electrical equipment was inspected and necessary maintenance carried out. The coils of No. 2 generator were cleaned and painted with black glyptol. Three oil breakers were inspected and contacts adjusted. The gates on No. 2 turbine, which had been badly out of balance, were altered and a marked improvement in operating conditions was obtained. An oil pump, unloader valve and sump tank on No. 2 unit governor system, which were worn out, were replaced with spare equipment which had been in storage at the Big Chute generating station. The bracket for the upstream regulating shaft bearing in No. 3 turbine failed and was repaired, additional stiffening and supporting structure being installed. A new downstream runner for No. 3 turbine was purchased and held available in stock as a protection to service should the runner in service fail.

At McVittie generating station, during the shutdown for construction purposes, a general inspection was made and advantage taken of the shutdown to carry out certain maintenance work. All gates were removed and examined and 67 new gate-link bolts and three eccentric bolts were made. The interior of both penstocks and of No. 1 exciter flume were scraped, cleaned and painted.

At Stinson generating station extra supports were installed for the upstream regulating shaft bearings on No. 1 and No. 2 turbine. Repairs were made to the holes and cracks in the forebay wall.

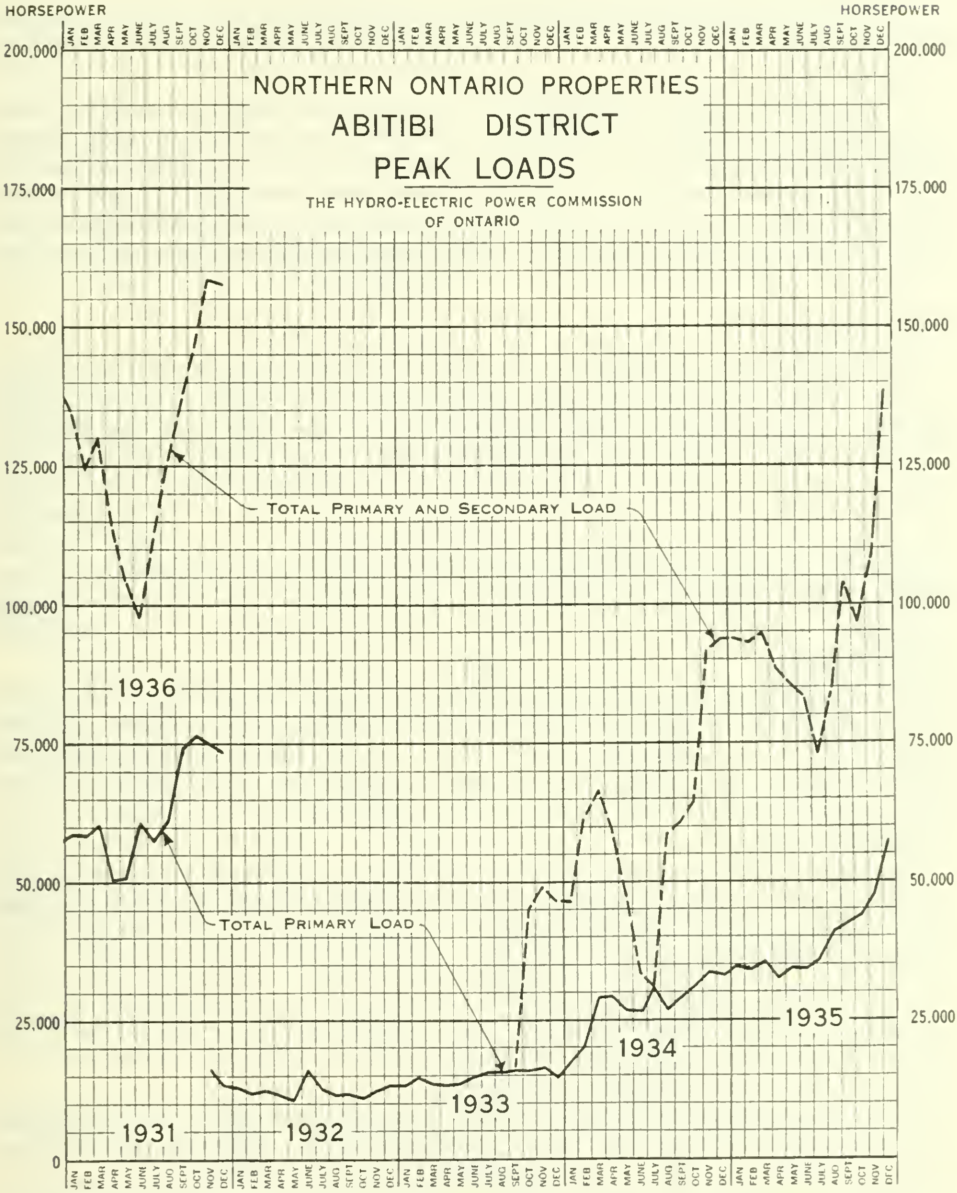
Transmission Lines

Routine patrolling and maintenance was carried out during the year. Two poles broken by trucks were replaced. Insulators were tested.

Abitibi District

Generation

At the beginning of the fiscal year two 55,000-horsepower generating units were in service at Abitibi Canyon. During the year the installation of No. 3, 4 and 5 units was completed and these were released for service on December 18, 1935, January 28, 1936, and May 7, 1936, respectively. The generating capacity of the plant was thereby increased to 275,000 horsepower, but pending the installation of additional transformer capacity the output



of the plant is limited by the existing three power transformer banks, which have a total capacity of approximately 165,000 horsepower.

Since the release for service of No. 3 unit the normal procedure has been to operate with three units in service continuously.

The completion and occupation of ten new operators' houses, a new retail store, a new staff-house, a new school and a new hospital, relieved to a great extent the lack of suitable living and service accommodation for the permanent staff.

Operation of the station throughout the year was satisfactory, equipment failures being confined to a few minor items which had no effect on service to customers.

Inspections, tests, and periodic overhauls of equipment were made according to schedule, and maintenance was largely confined to minor repairs and adjustments, the only exceptions of note being a complete overhaul of the three-phase, 1,500-kv-a service transformer, which was necessary to correct excessive vibration, and an abnormal amount of maintenance to the high-tension arresters, apparently necessitated by the extreme temperature changes to which they are subject at this location.

Transmission

On September 23, during a heavy wind and electrical storm, which was general over the district, all high-tension lines were subject to several short outages. These were followed in the case of the lines serving Ramore, Kirkland Lake, Larder Lake and Matachewan, by an outage of several hours duration when failure of a crossarm bolt on the Kirkland Lake-Matachewan circuit permitted the power and telephone conductors to come together. The time required to isolate and locate this failure was prolonged because an abnormal line set-up existed at the time which prevented quick sectionalizing, and because the fault occurred in the middle of a line section which traversed exceptionally rough country, demanding patrol on foot during the heavy storm.

On October 21 and 22 the high-tension lines serving Ramore, Kirkland Lake, Larder Lake and Matachewan were subject to a number of short outages due to a fall of heavy wet snow. After the snow had built up a heavy load on the telephone conductors it would drop off, and the sudden release of this load caused them to whip up within arcing distance of the power conductors.

Other than the above there were twenty-one automatic outages of high-tension circuits between Abitibi Canyon and Copper Cliff, seventeen of which were attributable to lightning, two to unknown causes and two to causes external to the lines.

There were eighteen automatic outages of the circuits from Abitibi Canyon to Kirkland Lake, Larder Lake and Matachewan, seven of which were attributable to lightning, six to high winds, one to an unknown cause and four to causes external to the lines.

On November 19, 1935, a newly completed section of single-circuit 132,000-volt wood-pole line between Blezard Valley junction and Falconbridge transformer station was tested and placed in service.

On December 1, 1935, a newly completed section of single-circuit 132,000-volt wood-pole line between Kirkland Lake and Larder Lake transformer stations was tested and placed in service.

During the summer a 132,000-volt single-circuit wood-pole line between Iroquois Falls and Kirkland Lake and a switching station near Kirkland Lake were constructed, so that two separate circuits between Abitibi Canyon and Kirkland Lake are now available. Besides increasing the transmission capacity to the Kirkland Lake area, the provision of this second circuit will greatly reduce the number of interruptions to customers' service necessary for maintenance or construction work.

Maintenance of transmission lines during the year was largely confined to replacement of damaged insulators, brush cutting on the right-of-way and treatment of wood poles at the ground line.

The usual inspections of towers, insulators, conductors and sky-wire were conducted, and a few minor repairs found necessary. In an effort to reduce the resistance from sky-wire to ground on the Timmins-Copper Cliff steel-tower line, high-resistance connections between sky-wire and towers were shunted with short lengths of conductor, and the footing-to-ground resistance of several towers was reduced by connecting buried lengths of copper conductor to the tower legs.

In an effort to prevent heaving of poles and towers due to frost action in heavy clay, several tower footings and the poles in the Blezard Valley switching station structure were dug out and backfilled with slag from the nickel smelters. This treatment appeared to be the most successful of several tried the previous year, but it is only practicable within reasonable hauling distance of the smelters.

Transformation

The operation of the transformer stations was satisfactory, and maintenance was confined to adjustments, repairs and improvements of a routine nature.

On November 19, 1935, a new 4,500-kv-a outdoor type, 132,000/27,200-volt station at Falconbridge was placed in service with two 1,500-kv-a transformers connected in open-delta. The third 1,500-kv-a transformer was connected, tested, and placed in service on December 1.

The capacity of the Timmins transformer station was increased by the replacement of the original 1,000-kv-a, 3-phase, 121,000/27,200-volt transformer, with three 1,500-kv-a, 132,000/27,200-volt transformers. On November 24, two of the new 1,500-kv-a transformers connected in open-delta were placed in service to carry part of the station load, the remainder being carried by the original transformer. On January 27, 1936, the third 1,500-kv-a transformer was connected and placed in service and the entire station load was transferred to the new bank. The oil circuit-breakers in the two low-tension feeders at this station were equipped with automatic reclosing features.

On December 21, 1935, a new 4,500-kv-a, outdoor-type, 132,000/27,200-volt station at Larder Lake was placed in service with two 1,500-kv-a transformers in open-delta. The third 1,500-kv-a transformer was connected, tested and placed in service on December 8.

During the year the International Nickel Company doubled the capacity of its high-tension station at Copper Cliff by the installation of a second bank of three 5,000-kv-a transformers, and also installed relaying equipment to permit receipt of power from Abitibi Canyon over two high-tension circuits in parallel.

At Matachewan transformer station a newly installed spare 1,500-kv-a transformer was tested and found satisfactory for service on March 8. The two low-tension feeders from this station, which were formerly tied together outside the station and fed through one oil circuit-breaker, were separated on March 8, and the second feeder was connected to the station low-tension bus through a newly installed oil circuit-breaker with isolating disconnects.

At Kirkland Lake transformer station an oil circuit-breaker with isolating disconnects was installed between the low-tension side of the 28,500-kv-a transformer bank and the station low-tension bus, and was placed in service on December 1, 1935.

Distribution

On December 15, 1935, a pole-type, 100-kv-a distribution station, serving the municipalities of Ramore and Matheson, commenced operation, and on October 3, 1936, a pole-type, 25-kv-a distribution station serving domestic consumers in Hislop town site was placed in service.

Operation of low-tension feeders and distribution stations was satisfactory and maintenance was confined to routine items.

New low-tension feeders were placed in service as follows:—A short 26,000-volt feeder from Falconbridge transformer station to Falconbridge Nickel Mines on November 19; 3.5 miles of 26,000-volt feeder between Timmins transformer station and Paymaster Consolidated Gold Mines on November 24, 1935; a short 26,000-volt feeder from Larder Lake transformer station to Omega Gold Mines on December 1, 1935; a short 26,000-volt tap feeder from the Bidgood feeder to Glenora Gold Mines on May 11, 1936; an extension of the Bidgood Kirkland Gold Mines feeder to Moffatt Hall Gold Mines on June 26, 1936; 1.3 miles of 26,000-volt feeder from Kirkland Lake transformer station to Kirkland Gold Rand on July 21, 1936; and 2.5 miles of 26,000-volt feeder from Paymaster Gold Mines to Preston East Dome on September 30, 1936.

Espanola District

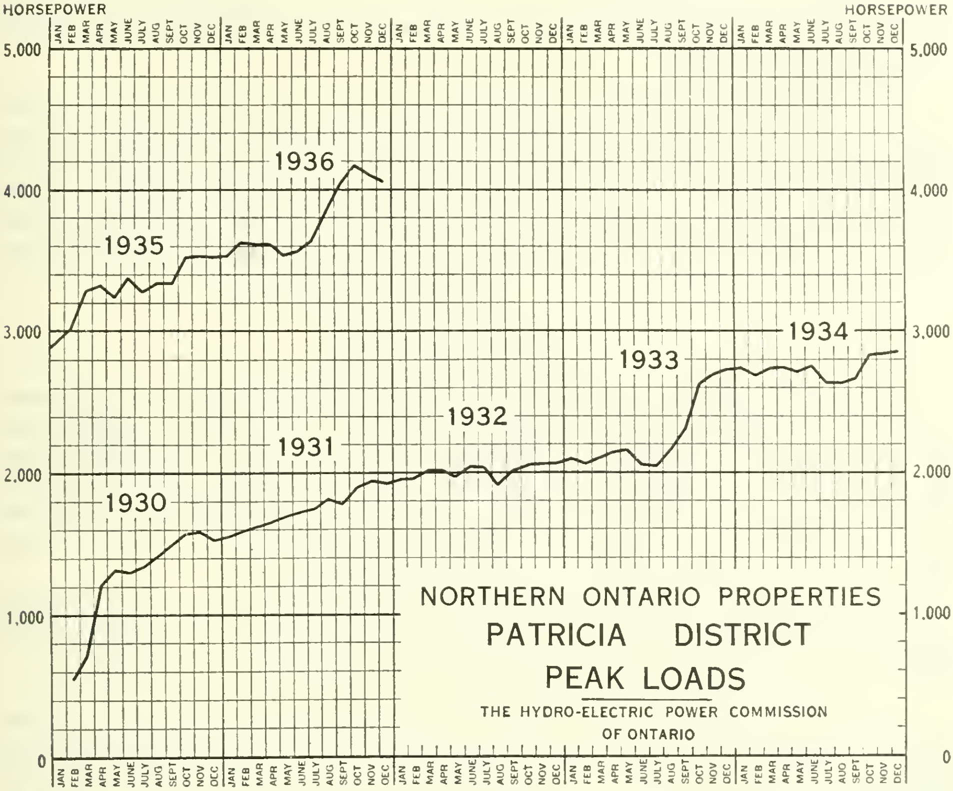
Until September 15, 1936, there were two major interruptions to the McMillan Gold Mine to permit repairs to the Abitibi Power and Paper Company's turbine equipment at Espanola. From September 15 to October 31, the McMillan Gold Mine was subjected to sixteen service interruptions, which were necessitated by preparations for, and operation of, a supply of emergency power to the Sudbury district from Espanola, via a temporary transmission circuit which was tied into the Espanola-McMillan circuit at the Espanola plant.

The Commission's transmission line was patrolled periodically and only minor items of maintenance were required.

Patricia District

The generating and transformer station at Ear Falls on the English river operated satisfactorily throughout the year. The load on the system was higher, the energy generated and the year's peak increased 19 per cent, while the average monthly peak increased 15 per cent over 1935.

No additional customers were added to the system during the year, but the Red Lake Gold Shore Mines brought its mill into production in September, resulting in a considerable increase in load. This customer's substation was placed in service at 44,000 volts on July 5, power being supplied over a short section of transmission line connected to the McKenzie



Red Lake Gold Mines line. It had previously been supplied at 2,300 volts from the Howey Gold Mines.

An additional bank of three 750-kv-a transformers, together with necessary connections, was placed in service at Ear Falls on July 6.

Routine maintenance work was done on all electrical and hydraulic equipment throughout the year. The circulating oil pump on the generator failed in service on June 18, resulting in an interruption of 1 hour and 53 minutes. By arrangement with the customers the generating unit was shut down for a period of 31 hours on July 5 and 6 for special inspection and repairs. A new oil pump was also installed at this time.

Work was begun on the second generating unit at Ear Falls generating station. On October 25 an interruption of 16 hours was arranged in order to allow the placing of a coffer dam across the tail race for construction purposes.

The 44,000-volt transmission line, which is owned by the Howey Gold Mines Limited, functioned satisfactorily throughout the year and was operated and maintained for the Company under the same cost arrangement as in previous years. There were six outages of this circuit during the season due to lightning. No permanent damage was done to the line during any storm, and it was ready for immediate resumption of service.

The flow in the English river was regulated and controlled by means of the Lac Seul conservation dam at Ear Falls as required by the Lake-of-the-Woods Control Board.

The precipitation in the vicinity of Ear Falls was below normal, about 18 inches being recorded. The elevation of Lac Seul has steadily risen during the year to a high point of 1,170.2 as compared with the previous year's high level of 1,168.9. A relatively large river flow was permitted, but this was of necessity governed to some extent by the plant and system load conditions, which required a maximum head being maintained to secure the most efficient operation and output of the generating unit.

St. Joseph District

The generating and transformer station at Rat Rapids on the Albany river operated satisfactorily throughout the year. The load on the system has increased but comparisons between 1936 and 1935 should take into consideration the fact that the plant was in operation only seven months in 1935. The average monthly energy generated was 38.7 per cent greater and the average monthly peak was 26.4 per cent greater than the previous year. The yearly peak shows an increase of 30 per cent.

On December 15, 1935, a voltage regulator was installed on the generator and new shunt field coils were installed in the exciter. The installation of this regulator improved the quality of service given to the customers.

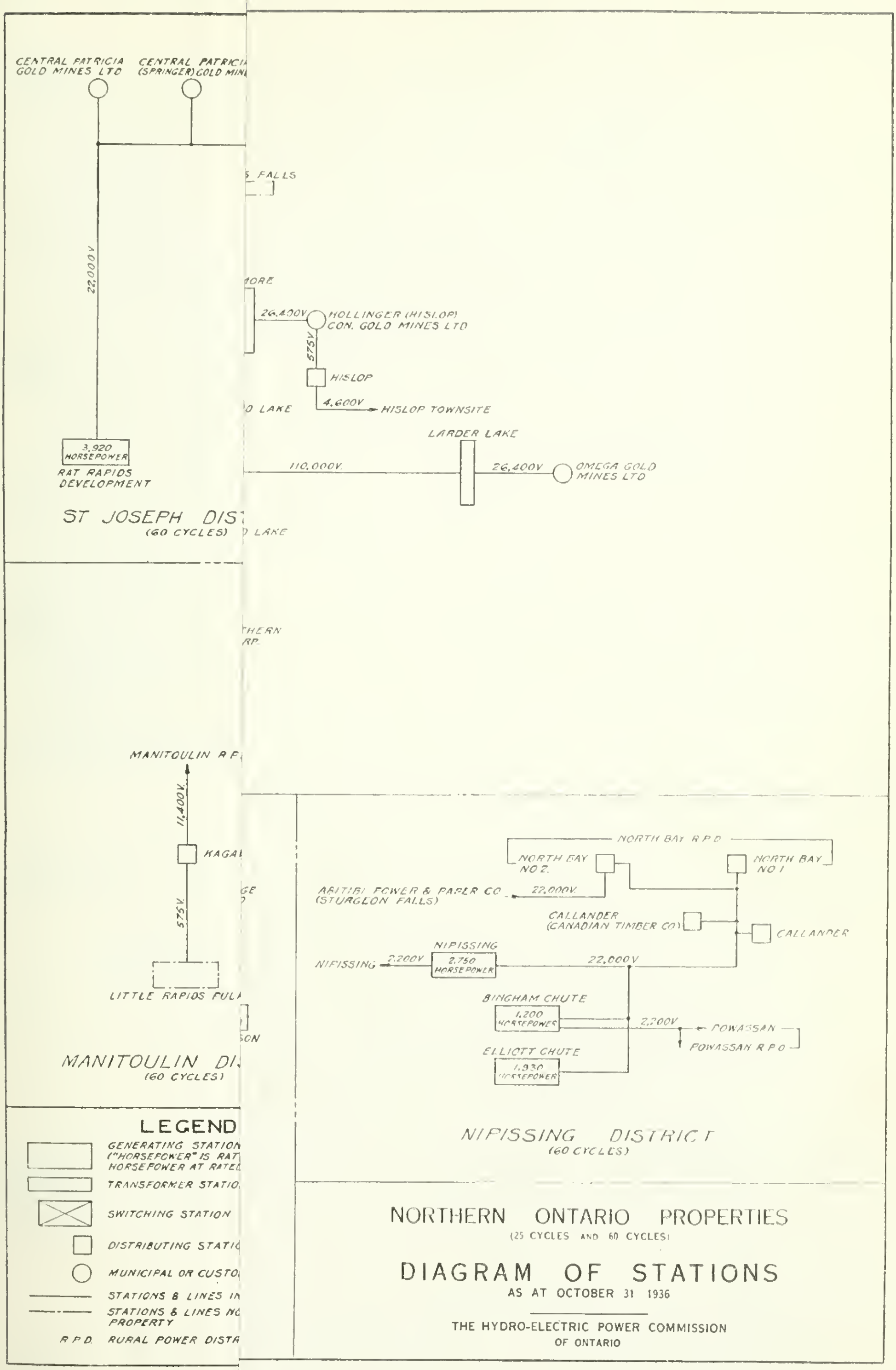
Considerable trouble was experienced with the belt drive to the exciter. On two occasions, February 4 and September 13, the belt failed in service, resulting in interruptions of 1 hour 41 minutes and 37 minutes respectively. Pulleys with wider faces were installed and a wider belt is being held in readiness.

An additional generator rated at 1,750 horsepower and a bank of three 500-kv-a transformers were placed in operating service at Rat Rapids generating station on October 8. Subsequent to this the No. 1 unit was inspected and overhauled where necessary.

The 22,000-volt single-circuit transmission line between the generating station and the mining customers functioned satisfactorily. There were four outages of this circuit during the season due to lightning, but no permanent damage resulted and the line was ready for immediate resumption of service. Due to the character of the muskeg through which this line passes it has been necessary in some sections to install additional guying and braces to the poles.

During July the area around Rat Rapids was menaced by forest fires. The Springer station of the Central Patricia Mines was not in service at this time, and in order to avoid unnecessary interruptions to the other stations the 22,000-volt line tap to this station was disconnected. This was reconnected on October 9.

The precipitation in the vicinity of Rat Rapids was relatively low, approximately 18 inches being recorded. The elevation of lake St. Joseph on October 31 was 1,225.42 as compared with 1,226.33 on the same date in 1935.


CENTRAL PATRICIA GOLD MINES LTD
CENTRAL PATRICI (SPRINGER) GOLD MIN
22,000V
3,920 HORSEPOWER
RAT RAPIDS DEVELOPMENT
ST JOSEPH DIS
(60 CYCLES)
S FALLS
MORE
26,400V
HOLLINGER (HISLOP) CON. GOLD MINES LTD
575V
HISLOP
4,600V
HISLOP TOWNSITE
O LAKE
LARDER LAKE
110,000V
26,400V
OMEGA GOLD MINES LTD
D LAKE
THERN
RP.
MANITOULIN R P
11,400V
KAGA
575V
GE
D
LITTLE RAPIDS PUL
SON
MANITOULIN DI
(60 CYCLES)
LEGEND
GENERATING STATION ("HORSEPOWER" IS RAT HORSEPOWER AT RATE
TRANSFORMER STATIO
SWITCHING STATION
DISTRIBUTING STATI
MUNICIPAL OR CUSTO
STATIONS & LINES IN
STATIONS & LINES NO PROPERTY
R P D. RURAL POWER DISTR
NORTH BAY R P D
NORTH BAY NO 2
NORTH BAY NO 1
ABITIBI POWER & PAPER CO (STURGEON FALLS)
22,000V
CALLANDER (CANADIAN TIMBER CO)
CALLANDER
NIPISSING
2,200V
NIPISSING
2,750 HORSEPOWER
22,000V
BINGHAM CHUTE
1,200 HORSEPOWER
2,200V
POWASSAN
POWASSAN R P D
ELLIOTT CHUTE
1,930 HORSEPOWER
NIPISSING DISTRICT
(60 CYCLES)

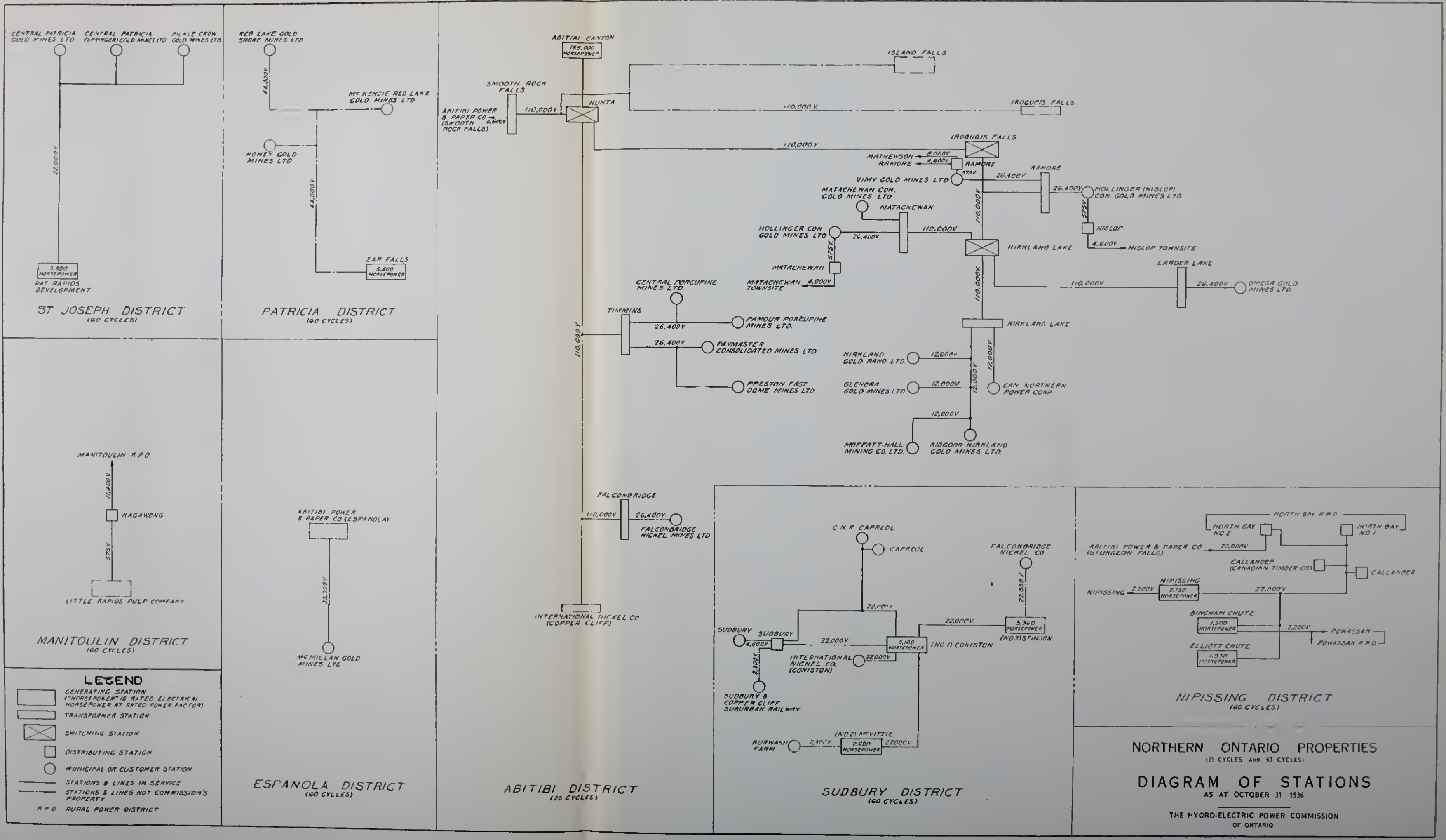
NORTHERN ONTARIO PROPERTIES

(25 CYCLES AND 60 CYCLES)

DIAGRAM OF STATIONS

AS AT OCTOBER 31 1936

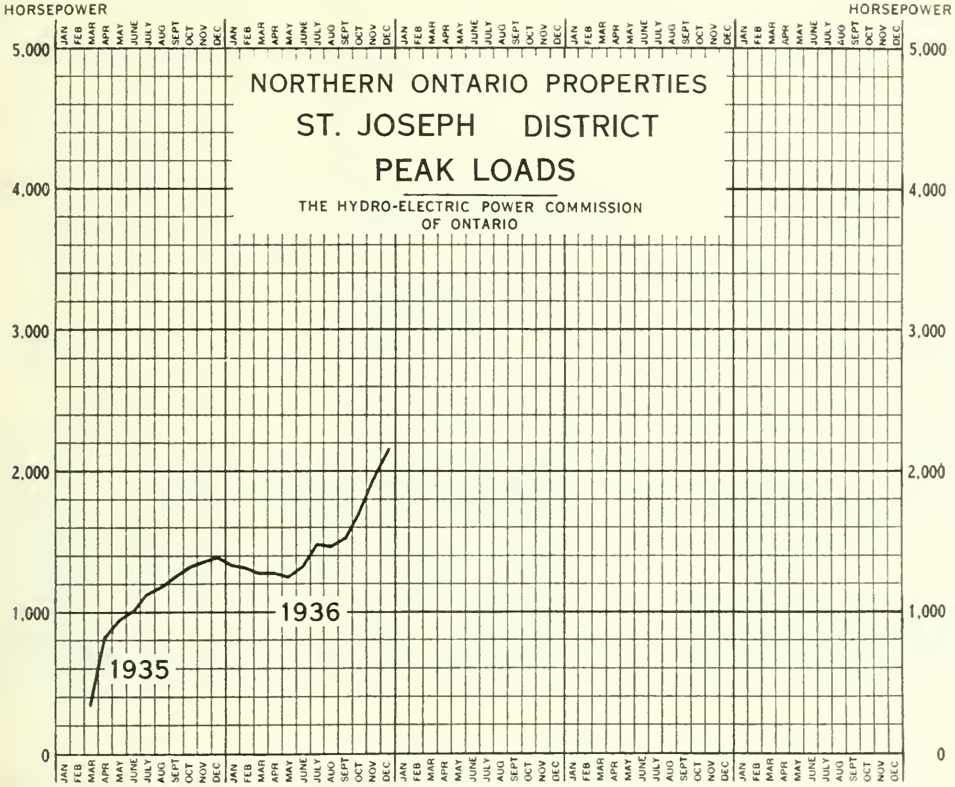
THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO


CENTRAL PATRICIA GOLD MINES LTD
CENTRAL PATRICIA (SPRINGER) GOLD MINES LTD
PICKLE CROW GOLD MINES LTD
22,000V
3,920 HORSEPOWER
RAT RAPIDS DEVELOPMENT
ST JOSEPH DISTRICT (60 CYCLES)
RED LAKE GOLD SHORE MINES LTD
44,000V
McKENZIE RED LAKE GOLD MINES LTD
HOWEY GOLD MINES LTD
44,000V
EAR FALLS
5,400 HORSEPOWER
PATRICIA DISTRICT (60 CYCLES)
MANITOULIN R.P.D.
11,400V
KAGAWONG
575V
LITTLE RAPIDS PULP COMPANY
MANITOULIN DISTRICT (60 CYCLES)
ABITIBI POWER & PAPER CO (ESPANOLA)
33,000V
McMILLAN GOLD MINES LTD
ESPANOLA DISTRICT (60 CYCLES)
ABITIBI CANYON
165,000 HORSEPOWER
SMOOTH ROCK FALLS
ABITIBI POWER & PAPER CO (SMOOTH ROCK FALLS)
6,600V
110,000V
NUNTA
ISLAND FALLS
110,000V
IROQUOIS FALLS
110,000V
IROQUOIS FALLS
MATHEWSON 8,000V
RAMORE 4,600V
RAMORE
575V
VIMY GOLD MINES LTD
26,400V
RAMORE
26,400V
HOLLINGER (HISLOP) CON. GOLD MINES LTD
575V
HISLOP
4,600V
HISLOP TOWNSITE
MATACHEWAN CON. GOLD MINES LTD
MATACHEWAN
110,000V
HOLLINGER CON GOLD MINES LTD
26,400V
575V
MATACHEWAN
MATACHEWAN TOWNSITE 4,000V
110,000V
KIRKLAND LAKE
110,000V
LARDER LAKE
110,000V
26,400V
OMEGA GOLD MINES LTD
110,000V
KIRKLAND LAKE
KIRKLAND GOLD RAND LTD
12,000V
GLENORA GOLD MINES LTD
12,000V
12,000V
12,000V
CAN NORTHERN POWER CORP
12,000V
MOFFATT-HALL MINING CO. LTD.
BIDGOOD KIRKLAND GOLD MINES LTD.
CENTRAL PORCUPINE MINES LTD.
TIMMINS
26,400V
PAMOUR PORCUPINE MINES LTD.
26,400V
PAYMASTER CONSOLIDATED MINES LTD
PRESTON EAST DOME MINES LTD
110,000V
FALCONBRIDGE
110,000V
26,400V
FALCONBRIDGE NICKEL MINES LTD
INTERNATIONAL NICKEL CO (COPPER CLIFF)
ABITIBI DISTRICT (25 CYCLES)
C.N.R. CAPREOL
CAPREOL
FALCONBRIDGE NICKEL CO
22,000V
22,000V
22,000V
5,360 HORSEPOWER
(NO 3) STINSON
SUDBURY
SUDBURY
4,000V
22,000V
5,100 HORSEPOWER
(NO 1) CONISTON
INTERNATIONAL NICKEL CO. (CONISTON)
22,000V
2,300V
SUDBURY & COPPER CLIFF SUBURBAN RAILWAY
BURWASH FARM
2,300V
(NO 2) McVITTIE
2,680 HORSEPOWER
22,000V
SUDBURY DISTRICT (60 CYCLES)
NORTH BAY R.P.D.
NORTH BAY NO 2
NORTH BAY NO 1
ABITIBI POWER & PAPER CO (STURGEON FALLS)
22,000V
CALLANDER (CANADIAN TIMBER CO)
CALLANDER
NIPISSING
2,200V
NIPISSING
2,750 HORSEPOWER
22,000V
BINGHAM CHUTE
1,200 HORSEPOWER
2,200V
POWASSAN
POWASSAN R.P.D.
ELLIOTT CHUTE
1,930 HORSEPOWER
NIPISSING DISTRICT (60 CYCLES)
LEGEND
GENERATING STATION ("HORSEPOWER" IS RATED ELECTRICAL HORSEPOWER AT RATED POWER FACTOR)
TRANSFORMER STATION
SWITCHING STATION
DISTRIBUTING STATION
MUNICIPAL OR CUSTOMER STATION
STATIONS & LINES IN SERVICE
STATIONS & LINES NOT COMMISSION'S PROPERTY
R.P.D. RURAL POWER DISTRICT

NORTHERN ONTARIO PROPERTIES
(25 CYCLES AND 60 CYCLES)

DIAGRAM OF STATIONS
AS AT OCTOBER 31 1936

THE HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO



NORTHERN ONTARIO PROPERTIES—LOADS OF MUNICIPALITIES, 1934-35-36

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
NIPISSING DISTRICT					
Callander	198.5	200.7	202.7		2.0
Nipissing	3.0	3.0	3.0		
North Bay	3,087.1	3,215.1	3,297.3		82.2
Powassan	103.0	120.4	134.1		13.7
SUDBURY DISTRICT					
Capreol		132.0	155.5		23.5
Sudbury	3,807.0	4,505.3	5,764.1		1,258.8

NORTHERN ONTARIO PROPERTIES—LOADS OF MUNICIPALITIES, 1934, 1935, 1936—Concluded

Municipality	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
ABITIBI DISTRICT					
Matachewan Townsite	....	51.6	78.1	....	16.5

ABITIBI DISTRICT—LOADS OF NEW MUNICIPALITIES

Municipality	Date connected	Initial load	Oct. 1936	Change in load	
				Decrease	Increase
Ramore-Matheson Townsite	Dec. 15, 1935	44.5	65.5	....	21.0
Hislop Townsite	Oct. 3, 1936	8.0	8.0	....	....

NORTHERN ONTARIO PROPERTIES—LOADS OF RURAL POWER DISTRICTS, 1934-35-36

Rural power district	Peak load in horsepower			Change in load 1935-36	
	Oct. 1934	Oct. 1935	Oct. 1936	Decrease	Increase
North Bay	100.5	72.0	117.6	....	45.6
Powassan	3.0	3.3	9.0	....	5.7

SECTION III

MUNICIPAL WORK

The Commission acts in an advisory capacity to the municipalities with which it has contracts, and assists the municipal officials to purchase, construct or extend distribution systems. As provided under *The Power Commission Act*, all rate adjustments are approved by the Commission, therefore a study of the operating conditions of all utilities is made annually and adjustments recommended.

In rural power districts, the Commission on behalf of the township corporations operates the rural power systems, and distributes electrical energy to the customers of the respective corporations in all such rural power districts.

NIAGARA SYSTEM

In the Niagara system load increases were recorded in 136 out of a total of 166 municipalities and in 84 out of 87 rural power districts. The aggregate average load supplied to municipalities and other customers on this system during the year 1936 increased substantially.

Engineering Assistance to Municipalities

General engineering assistance was given to practically all municipalities in the Niagara system respecting the operation and management of their local Hydro utilities.

Certain municipalities received special engineering advice and assistance, which are more fully referred to below:

Aurora—A survey of the distribution system was made, and recommendations regarding necessary changes to bring the construction up to standard were given.

Baden—Three 75-kv-a. transformers, with a new structure, were installed to serve an industry which changed its supply from 4,000 to 550 volts.

Beamsville—A valuation of the 66 2/3-cycle distribution system was made. The municipality is considering its purchase and proposes entering into a contract with the Commission for a supply of 66 2/3-cycle power on a cost basis.

Brampton—The distribution system was changed from 2,200 volts to 4,100 volts. The engineering features in connection with the change-over were designed by the Commission.

Brantford—The work of transferring the domestic and commercial customers from the 66 2/3-to 25-cycle circuits was commenced. When completed, this change will permit the removal of a number of duplicate lines.

Essex—To supply increased load to a canning factory, additions to the distribution system were made and three 50-kv-a., 2,300/230-volt transformers installed.

Exeter—The Exeter waterworks system has changed from unfiltered river water to spring water. Arrangements have been made to supply 15 horsepower for pumping at the springs about one mile northeast of the village, and to serve a 15-horsepower pump in a new pumping station in the village.

Fergus—A second 4,000-volt primary line was constructed from the substation to a large manufacturing plant, to take care of increased load and to allow for more flexible operation.

Georgetown—An ornamental street-lighting system was installed in the business section of the town and poles were removed from the main street. Service is given to consumers from the rear of the buildings.

Galt—Two 13,200-volt substations serving power consumers were modernized by the installation of outdoor switching equipment, and metal-clad secondary equipment was installed in one.

Approximately 6,000 feet of underground street-lighting cable was replaced. A section of 4,000-volt lighting primary was placed underground.

One new manufacturing load of about 150 horsepower was secured and an addition to a plant added a further 150 horsepower load.

Hamilton—Domestic and commercial customers formerly served from the overhead lines of the 66 2/3-cycle system, were completely changed over to 25-cycle service. This will complete the transfer to 25 cycles for the present time. There remains to be changed only the underground systems supplying commercial consumers in the downtown area, which for the present is held in abeyance.

Kitchener—Lighting and street-lighting distribution in the new Westmount area was completed. All lighting services are at the rear of the buildings, all poles having been removed from the streets.

Seventy ornamental street-lighting standards, each with one 500-watt unit, and twenty-four two-light standards with two 500-watt units were installed, all served by a total of 17,000 feet of underground steel-armoured, lead-covered, single-conductor, series, street-lighting cable. Two 60-kw series, street-lighting transformers were purchased and installed to supply the additional equipment.

Lambeth—The police village installed a new street-lighting system, using suspension lights over the centre of No. 2 and No. 4 highways. The main streets of the village have sixteen 300-watt, 120-volt multiple units.

Leamington—In order to supply increased demand for power in a manufacturing plant, the consumer constructed a sub-station of 750-kv-a capacity to take delivery of power at 26,400 volts and transform it to 4,000 volts for distribution throughout the plant and to the pump house situated on the shore of lake Erie.

London Township Voted Area—Because of increased activity in home building immediately north of the city of London, a primary circuit was extended through a new subdivision to the banks of the Thames river. An initial load of 25 horsepower has been connected to this circuit northwest of the river by the London Hunt Club, for watering the greens and fairways of the golf course.

Mount Brydges—A London manufacturer has taken over the building of the former Crowe Automobile Company, which has been vacant for a number of years. A primary extension was built to serve this customer with 50 horsepower for woodworking machinery and lighting.

Palmerston—In conjunction with the widening of Main street, forty ornamental street-lighting standards were installed. The opening of the new pavement and the turning on of the street lights were suitably celebrated on October 8. Rebuilding of the distribution system was continued.

Port Rowan—The Walsingham rural power district was converted to 8,000 volts, necessitating the installation of transformers at Port Rowan for the purpose of transforming power supplied to this village from 8,000 volts to 4,000 volts.

Riverside—The Riverside Hydro-Electric Commission established its office in the town of Riverside and appointed its own staff. It commenced operating the system on July 20, 1936. The system was formerly operated by the Walkerville Hydro.

St. Catharines—An improvement in distribution has been made by re-arrangement of the 12,000-volt circuits and the sale to the municipality of the Carleton street line, thus providing a loop circuit around the city.

St. Clair Beach—St. Clair Beach Hydro-Electric system had been operated by Walkerville Hydro since its inception. The operation was taken over by Tecumseh Public Utilities Commission when an office was opened in Tecumseh July 20, 1936.

St. Thomas—In order to obtain added security to the service, an underground 15,000-volt, 250,000-circular-mil copper, three-conductor, paper-insulated, lead-covered cable with double steel-tape armouring, was installed between the municipal main distribution station and the Commission's St. Thomas transformer station. A No. 0 copper ground wire, attached at intervals to the lead and steel sheath, was installed in the trench and grounded at each end to the two station grounds. This is to prevent corrosion from D.C. railway 1,500-volt stray current.

Strathroy—The Public Utilities Commission moved to larger and better office quarters on the south side of the main street during the year, and installed modern up-to-date lighting equipment.

Tecumseh—The Tecumseh Public Utilities Commission established its office in the town and appointed its own staff. It commenced operation on July 20, 1936. The system was formerly operated by the Walkerville Hydro.

Toronto Township—A section in the western part of the Toronto Township system was transferred to a new substation constructed by the Commission near Clarkson.

Windsor—The municipalities of Windsor, Walkerville, Sandwich and East Windsor were amalgamated July 1, 1935. A new power agreement, effective January 1, 1936, was made by the Commission with the new city of Windsor. The loads supplied were billed on one composite peak, commencing January 1, 1936. Although the staffs of the four municipalities were not completely merged until the week of July 20, 1936, the records of operation as one system were consolidated from January 1, 1936.

Woodstock—A new 13,200/2,300-volt substation of 1,500-kv-a capacity was installed by the local system and the conductor in the west portion of the 13,200-volt ring-feeder bus was increased to No. 0 copper, in order to take care of new 2,000-horsepower industrial load in the northwest part of the city.

GEORGIAN BAY SYSTEM

No large extensions to equipment were made on this system during the year; there was however a substantial increase in load taken, both by municipalities and rural power districts. The Commission has a reciprocal arrangement with the town of Orillia respecting power supplies. During 1936 supplementary power was secured from the generating plants owned by the town of Orillia. During the previous year a large block of power was supplied by the Commission for a short term to the town of Orillia, pending completion of its Minden development.

There was an increase in yearly average loads taken in 44 out of a total of 59 municipalities and in 35 out of a total of 46 rural power districts. The increase in the average system load sold was approximately 5 per cent. as compared with the previous year.

Studies were made regarding additional generating, transformation and transmission equipment for this system.

Assistance and general engineering advice was given by the Commission to the various municipalities comprising the Georgian Bay system, in connection with the operation of their local distribution systems.

Special engineering advice and assistance was given to the following municipalities:

Coldwater—Studies were made and recommendations submitted covering the complete rehabilitation of the local distribution system and the installation of special street lighting equipment on the main street.

Huntsville—Plans were prepared and submitted covering the reconstruction of the local distribution system and the installation of ornamental street lights on the main street of the town.

EASTERN ONTARIO SYSTEM

In the Eastern Ontario system a general increase in load continued throughout the year. Load increases were recorded in 42 out of a total of 49 municipalities and in 33 out of a total of 35 rural power districts. In July, owing to very low water conditions on the Trent Canal system, there was a shortage in the necessary amount of electrical energy available to meet the requirements in the Central Ontario district. In order to meet this shortage a supply of 60-cycle power was obtained from the Niagara system by a connection made through the Chats Falls frequency-changer set and the use of one of the 220,000-volt transmission lines from Chats Falls to a point near Norwood.

All the requirements for firm power by the municipalities and customers of this system were met without increasing the amount of power already provided for, for the year, in the agreement with the Gatineau Power Company.

General engineering advice and assistance were given by the Commission to nearly all the municipalities served by this system.

Certain municipalities received special engineering advice and assistance in connection with the following items:

Bowmanville—The Bowmanville Public Utilities Commission purchased an office building on the main street. It was first occupied on October 14, 1936.

Cobourg—The Commission approved the purchase of a site and the construction of a combined stores and office building by the Cobourg Public Utilities Commission. The building will be ready for use early next year.

Napanee—Early in the year work was completed on a second 4,000-volt feeder from the substation to the town to take care of the increased load and to improve voltage conditions.

Newcastle—Estimates and data were submitted to the Newcastle Council with regard to the purchase of the local distribution system from the Commission. By-laws will be submitted to the electors on January 4, 1937.

Peterborough—The increase in the industrial and lighting load has been marked and this year the number of flat rate heaters installed reached a total of over 1,000. The city's load for the first time in its history exceeded 8,000 horsepower. This increased load necessitated considerable increase in the transformer capacity of the city's substation.

Stirling—The municipality's new underground street-lighting system was completed during the year and has greatly improved the appearance of the village.

THUNDER BAY SYSTEM

This system has experienced the most successful year in the history of its operation, due chiefly to the power requirements of gold mining operations in the Sturgeon river and Little Long Lac area as well as to increased production in the pulp and paper industry. The total average primary load sold by the system increased by approximately 9.6 per cent. over the previous year. The maximum system twenty-minute peak of primary power was approximately 19.3 per cent. greater than during the previous year. The increase in the peak demand over the previous year in primary power supplied to the mining load exclusively was approximately 82 per cent., and to the pulp and paper industry exclusively was approximately 34 per cent. In addition to a large increase in the power demand of the two mining companies served, two new mining properties were connected to the system. Negotiations were also conducted with several other mining properties.

The transformer station at Cameron Falls, supplying the mining load, was increased from 1,200 kv-a to 4,500 kv-a. Negotiations were carried on for the purchase, by the Commission, of the 90-mile transmission line between Cameron Falls and Little Long Lac, jointly owned by The Northern Empire and Little Long Lac Mining Companies. A new 110,000-volt transmission line between Cameron Falls and Little Long Lac was partially completed.

As the total system generating plant capacity was insufficient to supply the entire requirements of both primary and secondary power customers, due to the increase in firm power load reducing the amount available for secondary power supply, a large block of power was purchased from the Kaministiquia Power Company and utilized to supply the requirements of the secondary power customers.

Further studies were made concerning power rate reduction to the pulp and paper industry, and at the close of the year new rates were authorized and placed in effect. Customers formerly supplied at $21.00 per horsepower per annum for 110,000-volt service were given a rate of $18.00 per horsepower per annum and customers formerly supplied at various rates for 22,000-volt service were given a rate of $19.50 per horsepower per annum. Reduced resale rates for domestic and commercial lighting and power customers in Port Arthur, Fort William, and Nipigon village were authorized and placed in effect during the year.

General engineering advice and assistance with respect to operation of local distribution systems was given to the cities of Port Arthur and Fort William, also the village of Nipigon.

MANITOULIN RURAL POWER DISTRICT

No extensions were made to this distribution system, but a number of new customers were added to the existing lines. There was also an increase of about 20 per cent. in both the peak load and the average yearly load of the district. Further studies were made concerning power supply to the town of Little Current and the hamlets of Sheguindah and Manitowaning.

NORTHERN ONTARIO PROPERTIES

The Northern Ontario Properties cover various areas in the northern part of the Province in which power developments and transmission and distribution systems are operated by the Commission on behalf of the Provincial government, as distinct from the other systems operated by the Commission, on a cost basis, on behalf of the municipalities. The power utilized in this area is taken chiefly by mining properties. At the close of the year power was being supplied to two cities, three towns and villages, five hamlets and townsites, two rural power districts and to thirty other customers, for mining purposes. Very substantial increases in power demands were recorded in both the municipal as well as the mining loads, the increase in loads for mining purposes being approximately 33 per cent. over the previous year.

Engineering advice and assistance relative to power supply from the Commission was given to the town of Sioux Lookout and estimates were prepared covering the cost of a generating plant, transmission lines and transformer station necessary for that purpose.

The activities in the various districts comprising the Northern Ontario Properties are described in detail under each separate district in the following paragraphs:

Nipissing District

This district covers the area lying east and north of lake Nipissing and is served from a group of three small hydro-electric developments on the South river. The loads in this district remained fairly constant throughout the year.

Sudbury District

This district comprises the area in and adjacent to the city of Sudbury served by a group of three developments on the Wahnapitae river. In addition to the city of Sudbury and the town of Capreol, power is supplied to the International and Falconbridge Nickel Companies. Load growth in this district was quite pronounced, due largely to the increased demands of the city of Sudbury.

Studies were made during the year to provide additional generating plant capacity to meet increasing loads. The reconstruction of the transformer station at Sudbury, commenced last year, was completed and the capacity increased by the addition of a new bank of three 1,000-kv-a transformers, making the present total station capacity 6,000 kv-a.

Engineering advice and general assistance was given to the local Commissions in Sudbury and Capreol, covering the operation and management of their respective distribution systems.

Abitibi District

This district comprises the territory served by the transmission lines originating out of the Abitibi Canyon development and includes the mining areas between Sudbury and Timmins, and lying west of and adjacent to the Ontario-Quebec interprovincial boundary. There was a pronounced load increase in this district during the year, partly on account of the additional demand of existing customers and partly due to the demand of new mining properties connected during the year. The average load sold during the year was approximately 46 per cent greater than that sold during the previous year.

Three new 4,500-kv-a transformer stations, the construction of which was commenced last year, were completed and placed in operation during the year at Timmins, Falconbridge and Larder Lake, and a new 4,500-kv-a transformer station was designed and partially constructed at Pamour. This station will be completed and placed in operation early in 1937.

A new 110,000-volt transmission line, 56.75 miles in length, was constructed and placed in operation between Iroquois Falls and Kirkland Lake. This new line parallels the existing circuit and enables the Commission to give duplicate transmission service as far as the latter point. The construction of 8.15 miles of new 110,000-volt transmission line was commenced and partially completed in the Porcupine area and will be utilized to feed the new Pamour station as soon as the latter is placed in operation. Three new 26,400-volt branch transmission lines, having a total lenght of 11.11 miles, were constructed and placed in operation in the same area to serve three new mining properties, and three new 12,000-volt branch transmission lines having a total length of 2.61 miles, were constructed and placed in operation in the Kirkland Lake area to serve three new mining customers.

Most of the mining properties, both in the production and prospect stages, situated in the Porcupine, Kirkland Lake, Matachewan and Larder Lake areas were visited, and their local and executive staffs contacted at various times during the year with respect to their power supply for present and future requirements. As a result, several new power contracts were obtained and others are in prospect.

New distribution systems, partially constructed last year, were completed and placed in operation at the hamlet of Ramore and the town of Matheson. A new distribution system was constructed and placed in operation at the townsite of Hislop, in Hislop township, and a new distribution system was designed and partially constructed at King Kirkland townsite. This will be completed and placed in operation early in 1937.

Special engineering advice and assistance was given to the town of Timmins and to Teck township in respect to the townsite of Kirkland Lake.

Espanola District

This district covers the area adjacent to and within transmission distance of the Abitibi Power and Paper Company's power development at Espanola, from which source the Commission purchases power for supplying the mining properties in the district. At the present time only one mine is being served; there are, however, a number of properties in the development stage which have been furnished with information and contacted with respect to power supply.

Patricia District

This district includes that portion of the district of Patricia which can be reached by the transmission lines originating out of the Commission's Ear Falls development on the English river at the outlet of lac Seul. A considerable load increase has been recorded due to a new gold mine going into production. Three new firm power contracts were secured and provision was made for enlarging the generating plant to accommodate a second generating unit. When this new unit is placed in operation, probably in the summer of 1937, the present generating plant capacity will be doubled and will approximate 10,000 horsepower.

A power survey was made during the year of most of the prospective mining developments in the Red Lake mining area, the various mining properties were visited and the local and executive staffs contacted for the purpose of ascertaining their future power demands.

St. Joseph District

This district includes the territory which it is possible to serve by transmission lines originating out of the Rat Rapids development on the Albany river at the outlet of lake Joseph. Two mining properties are served at the present time. During the year new power contracts were executed with these companies and a second generating unit was installed at the development, increasing the capacity from approximately 1,000 to 3,000 horsepower. An additional power contract was secured with a third mining property and arrangements were made for delivering power early in 1937.

MUNICIPAL HYDRO UTILITIES

TWENTY-FIVE YEAR RECORDS

THE Hydro utilities of Ontario municipalities which are partners in the several systems of the Commission have a noteworthy record of successful achievement. Under the guidance of the Commission and with the benefit of service given by public-spirited citizens acting as commissioners and in other capacities, the local electrical utilities, whether organized as strictly "Hydro" systems or as branches of local public utilities, have built up through the years strong local distribution organizations in excellent financial strength with ample reserves and with rates for service at most attractive levels.

Many Hydro utilities now have records extending back for more than twenty-five years and it is therefore a fitting time to present a review of some of the achievements of the local systems. On the following pages are presented summary reviews of six Hydro utilities selected from those which have been in operation for a period of twenty-five years or more. The records presented relate to the Hydro utilities of the cities of London, population 75,484, and Woodstock, population 10,936; the towns of Preston, population 6,287, and of Hespeler, population 2,877; and the villages of New Hamburg, population 1,456, and Waterdown, population 912.

For each utility there is given a brief statement outlining its history, a summary of its present financial position, a table of the present charges for service for a few representative demands and consumptions, and a number of graphs showing the growth of the utility during the past twenty-five years.

Owing to the large variation in size of municipality, the scales employed for the graphs necessarily differ for each utility but certain methods have been followed to make them as uniform as possible. For each individual utility, the scales employed for the assets and liabilities are of course the same. It will be noted that for many years, the liabilities with minor fluctuations have remained more or less stationary or have actually been declining, the increased plant having been financed out of surplus, etc., and the original investment being under liquidation by the operation of sinking funds. For each municipal utility, the scales of horsepower and population bear a definite relationship to each other, being $\frac{1}{2}$ horsepower per capita for the same vertical height from zero. It will be noted for example, that in Hespeler the power taken has exceeded $\frac{1}{2}$ horsepower per capita since 1931, whereas, in London it has remained slightly below this amount, even in recent years. The character of the predominating industry has an important bearing on the average horsepower used per capita.

On each plate the four graphs showing revenue from various sources are to the same scale which, for any given municipality, enables a direct comparison of the several sources of revenue to be made. It will be noted that in most cases, revenues for domestic service, especially during the latter half of the period, have been of growing importance and in many cases, the chief source of income.

The graphs on the right hand side under domestic and commercial light service, clearly show the influence of increased consumption on average cost per kilowatt-hour.

LONDON—Population 75,484

THE PUBLIC UTILITIES COMMISSION

The city of London was one of the municipalities which took an active part in the discussions and investigations preceding the formation of the Hydro undertaking; being one of the seven which, in 1903, appointed the Ontario Power Commission—an investigating Commission which led to the Power Commission Act of 1906-7, and to the creation of The Hydro-Electric Power Commission of Ontario. It was also one of the first dozen municipalities to pass by-laws authorizing its city council to make a contract for power with the Commission.

Progressive management has characterized the operation of the London Hydro utility. It started the first Hydro shop in 1911. Although an old established community, there are 7,500 electric ranges distributed amongst a total of 15,000 homes and approximately 4,500 flat-rate water heaters are in service. The local Commission is equipped to take care of installation and maintenance work for its customers and maintains a stock of motors to replace or augment customers' equipment in an emergency. London has in operation the first low-voltage network system in Canada, giving uninterrupted service at lower cost than the old distribution system. In the downtown area, the distribution network is underground.

With the close of the twenty-sixth year of operation, the utility's total assets are $6,051,459; the total liabilities $914,295; the reserves and surplus $5,137,164. The percentage of net debt to total assets is only 11.1; in other words, eight-ninths of the total local distribution plant is already debt free.

Included with the assets and with the surplus above noted is an amount of $1,719,351 which represents the sinking fund equity of the local Hydro utility in The Hydro-Electric Power Commission's Niagara system. This has been accumulated as part of the annual cost of power paid to the Commission.

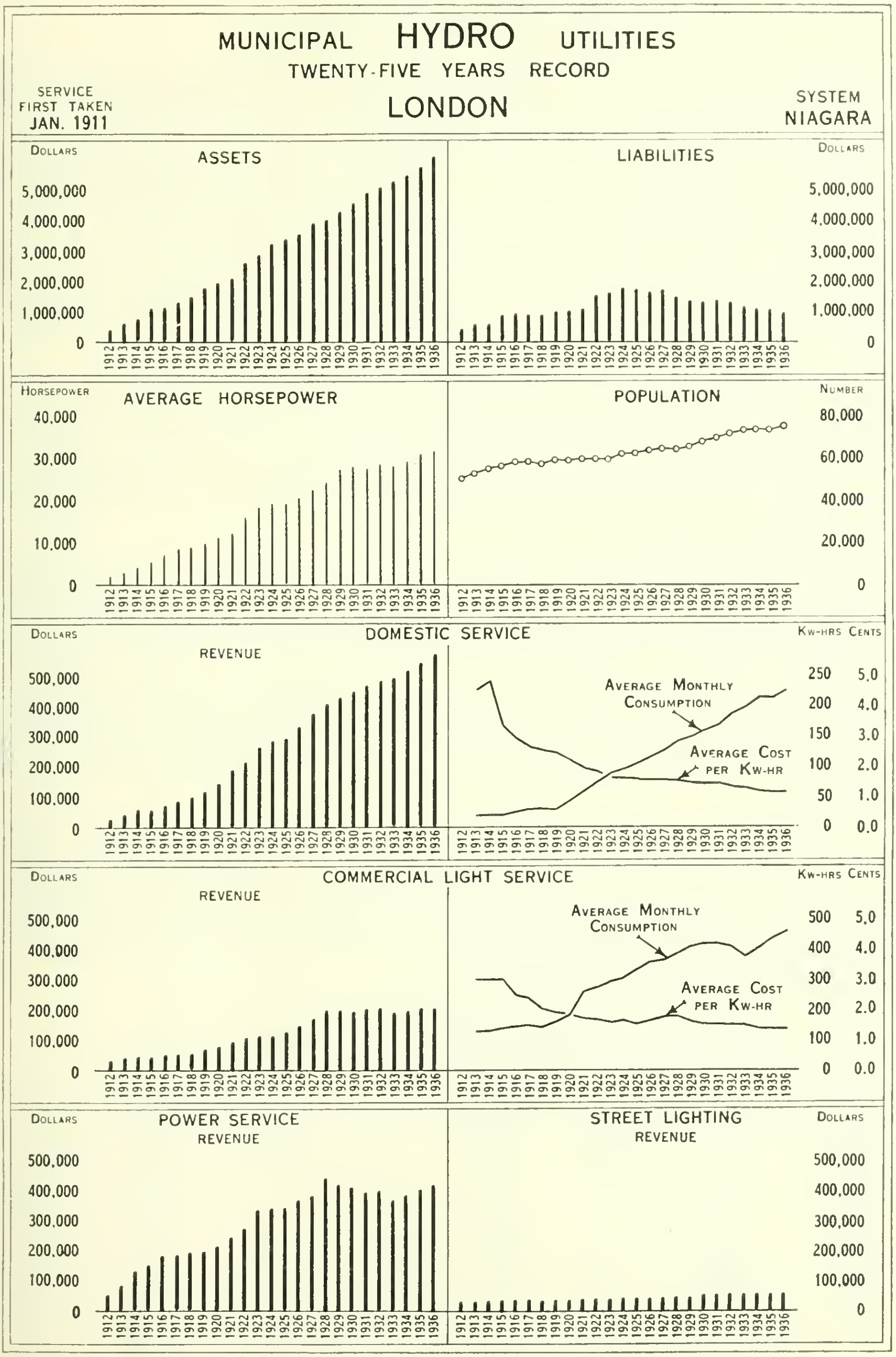
On the diagram facing this page a graphical presentation is given of the progress made by the London Hydro utility during the past twenty-five years. Throughout this period, the customers of the London utility have enjoyed favourable rates for service. The present cost of service to consumers, for a few representative billing demands and energy consumptions, is given in the tabulation below.

PRESENT COST OF SERVICE

Monthly Bills for Representative Demands and Consumptions

Domestic service		Commercial Light service			Industrial Power service		
Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill
kw-hrs	$ c.	kw	kw-hrs	$ c.	kw	kw-hrs	$ c.
25	0.75*	1	50	1.31	3	150	4.44
40	0.90	1	150	2.34	3	375	5.73
60	1.35	3	150	3.92	6	375	9.44
100	1.71	3	375	6.75	6	750	11.44
150	2.16	6	375	9.12	12	750	18.86
250	3.06	6	750	13.50	12	1,500	22.87
500	5.31	12	750	18.23	30	3,000	55.49
......	....	12	1,500	27.00	30	6,000	62.18
......	....	30	3,000	64.80	60	6,000	110.97
......	....	30	6,000	75.60	60	15,000	131.03

*Minimum bill.


MUNICIPAL HYDRO UTILITIES
TWENTY-FIVE YEARS RECORD
LONDON
SERVICE FIRST TAKEN JAN. 1911
SYSTEM NIAGARA
ASSETS
LIABILITIES
DOLLARS
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
AVERAGE HORSEPOWER
HORSEPOWER
40,000
30,000
20,000
10,000
POPULATION
NUMBER
80,000
60,000
40,000
20,000
DOMESTIC SERVICE
REVENUE
500,000
400,000
300,000
200,000
100,000
AVERAGE MONTHLY CONSUMPTION
AVERAGE COST PER KW-HR
KW-HRS
CENTS
250
200
150
100
50
5.0
4.0
3.0
2.0
1.0
0.0
COMMERCIAL LIGHT SERVICE
500
400
300
POWER SERVICE
STREET LIGHTING
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936

WOODSTOCK—Population 10,936

PUBLIC UTILITIES COMMISSION

Woodstock's interest in electric power antedates by many years the initiation of Hydro service. The first plant was established in 1884 in the Wood-Mosaic office. In 1891 it was taken over by a local firm, Patrick and Powel, and moved to Young street. The amount of power used by the city at this time was about 125 horsepower. In 1901 the city purchased the plant of 125 horsepower for the sum of $14,000 and operated it for about a decade, making such additions as the small growth in load demanded. In 1911 Woodstock became a co-operating partner in the Niagara system of The Hydro-Electric Power Commission and since that time, its Hydro utility has shared in the growth which has characterized the Hydro undertaking as a whole.

Prior to 1936, Woodstock had four firms using 200 horsepower, two using over 400 horsepower. In 1936 the Firestone Cotton Mills of Canada inaugurated a plant in Woodstock and became the largest user of power in the city, with an installation of some 2,000 horsepower. The initial load of about 600 horsepower exceeds the total power supplied by Woodstock's electrical plant in 1911.

With the close of the twenty-sixth year of operation, the total assets of the Hydro utility of Woodstock are $818,030; the total liabilities $51,208; the reserves and surplus $766,822. The percentage of net debt to total assets is only 2.9; in other words, the local distribution plant is nearly debt free.

Included with the assets and with the surplus above noted is an amount of $283,390 which represents the sinking fund equity of the local Hydro utility in The Hydro-Electric Power Commission's Niagara system. This has been accumulated as part of the annual cost of power paid to the Commission.

On the diagram facing this page, a graphical presentation is given of the progress made by the Woodstock Hydro utility during the past twenty-five years. Throughout this period the customers of the Woodstock utility have enjoyed favourable rates for service. The present cost of service to consumers for a few representative billing demands and energy consumptions is given in the tabulation below.

PRESENT COST OF SERVICE

Monthly Bills for Representative Demands and Consumptions

Domestic service		Commercial Light service			Industrial Power service		
Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill
kw-hrs	$ c.	kw	kw-hrs	$ c.	kw	kw-hrs	$ c.
25	0.75*	1	50	1.31	3	150	4.44
40	0.90	1	150	2.34	3	375	5.73
60	1.35	3	150	3.92	6	375	9.44
100	1.68	3	375	6.75	6	750	11.44
150	2.08	6	375	9.12	12	750	18.86
250	2.89	6	750	13.50	12	1,500	22.87
500	4.92	12	750	18.23	30	3,000	55.49
.....	.....	12	1,500	27.00	30	6,000	62.18
.....	.....	30	3,000	64.80	60	6,000	110.97
.....	.....	30	6,000	75.60	60	15,000	131.03

*Minimum bill.

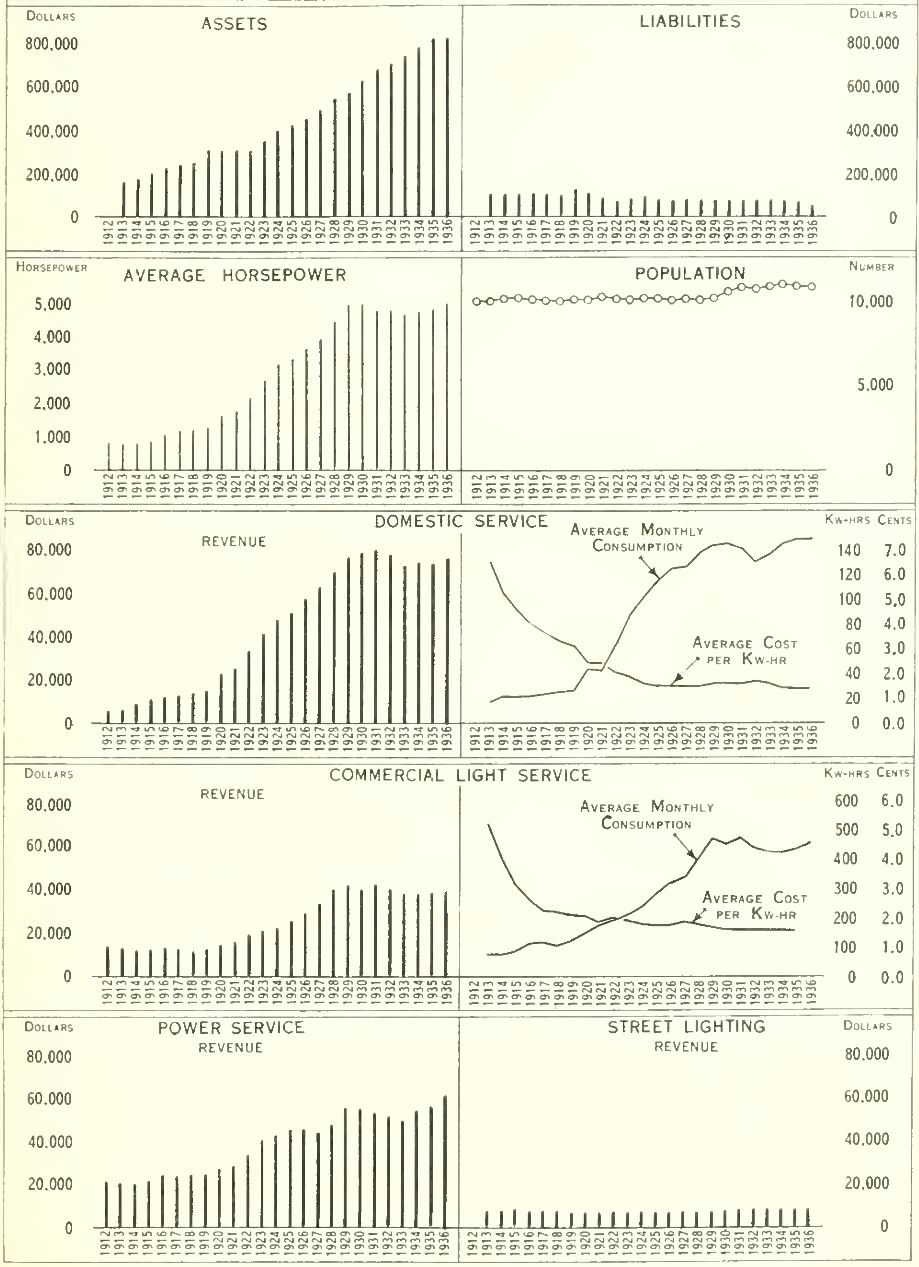
MUNICIPAL HYDRO UTILITIES

TWENTY-FIVE YEARS RECORD

SERVICE FIRST TAKEN JAN. 1911

WOODSTOCK

SYSTEM NIAGARA



PRESTON—Population 6,287

THE PRESTON LIGHT AND WATER COMMISSION

The town of Preston took an active part in the movement which led to the establishment of the Hydro undertaking. Whilst there was some local opposition at the time, as indeed there was in most of the pioneer municipalities of the undertaking, it did not prevent Preston becoming one of the earliest beneficiaries of the Hydro enterprise. The late George Pattinson of Preston, a member of the Ontario Legislature at that time, was appointed to act on a Commission of Enquiry with Hon. Adam Beck as Chairman. This Commission published five reports dealing with various areas of the Province.

Preston has about two dozen factories, and a sanitarium based upon its well known mineral springs. It is one of the group of Ontario towns and cities along the Grand river and has developed a fine park known as Riverside Park.

With the close of the twenty-sixth year of operation, the total assets of the Hydro utility of the town of Preston are $532,642; the total liabilities $44,919; the reserves and surplus $487,723. The percentage of net debt to total assets is only 13.4, more than six-sevenths of the total local distribution plant being debt free.

Included with the assets and with the surplus above noted, is an amount of $197,142 which represents the sinking fund equity of the local Hydro utility in The Hydro-Electric Power Commission's Niagara system. This has been accumulated as part of the annual cost of power paid to the Commission.

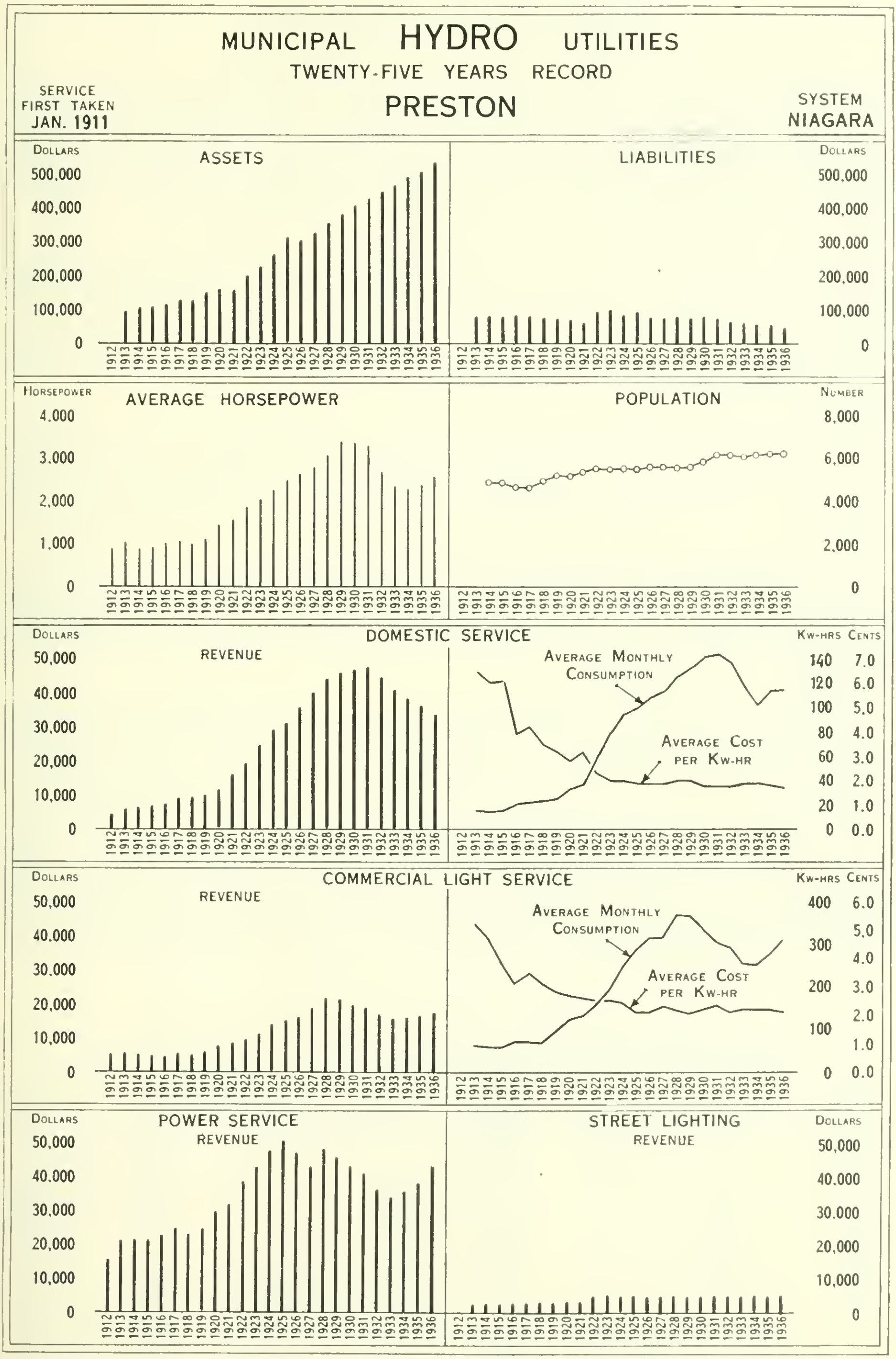
On the diagram facing this page, a graphical presentation is given of the progress made by the Preston Hydro utility during the past twenty-five years. A tabulation showing the present cost of service to consumers for a few representative billing demands and consumptions is given below.

PRESENT COST OF SERVICE

Monthly Bills for Representative Demands and Consumptions

Domestic service		Commercial Light service			Industrial Power service		
Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill
kw-hrs	$ c.	kw	kw-hrs	$ c.	kw	kw-hrs	$ c.
25	0.75*	1	50	1.49	3	150	4.65
40	1.08	1	150	2.79	3	375	6.03
60	1.62	3	150	4.46	6	375	9.89
100	1.91	3	375	7.97	6	750	12.05
150	2.27	6	375	10.47	12	750	19.77
250	2.99	6	750	15.93	12	1,500	24.09
500	4.79	12	750	20.93	30	3,000	58.53
......	....	12	1,500	31.86	30	6,000	65.21
......	....	30	3,000	75.60	60	6,000	117.05
......	....	30	6,000	91.80	60	15,000	137.10

*Minimum bill.


MUNICIPAL HYDRO UTILITIES
TWENTY-FIVE YEARS RECORD
PRESTON
SERVICE FIRST TAKEN JAN. 1911
SYSTEM NIAGARA
ASSETS
LIABILITIES
DOLLARS
500,000
400,000
300,000
200,000
100,000
0
AVERAGE HORSEPOWER
HORSEPOWER
4,000
3,000
2,000
1,000
0
POPULATION
NUMBER
8,000
6,000
4,000
2,000
0
DOMESTIC SERVICE
REVENUE
DOLLARS
50,000
40,000
30,000
20,000
10,000
0
AVERAGE MONTHLY CONSUMPTION
AVERAGE COST PER KW-HR
KW-HRS
140
120
100
80
60
40
20
0
CENTS
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
COMMERCIAL LIGHT SERVICE
REVENUE
KW-HRS
400
300
200
100
0
CENTS
6.0
5.0
4.0
3.0
2.0
1.0
0.0
POWER SERVICE
REVENUE
STREET LIGHTING
REVENUE
1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

HESPELER—Population 2,877

HYDRO-ELECTRIC COMMISSION

Long before the advent of electrical power, Hespeler, one of the early settlements in Ontario, made use of waterpower to operate a grist mill, a saw mill and a woollen mill. Later, a small electrical plant was owned and operated by Mr. J. S. Shantz, from whom it was purchased by the town in 1900 and operated as a public utility by the municipality until 1911, when Hespeler became a co-operating partner in the Hydro undertaking.

In 1907, when Hydro matters were being considered, the municipal plant had an installation of 100 horsepower and five other industrial plants had an aggregate installation of about 350 horsepower. The textile industry is still operating in the town, its largest power user being Dominion Woollens and Worsteds Limited. This and other important industries, however, are now operated by Hydro power.

Continuity of service given by public-spirited citizens has contributed substantially to the success of many local utilities associated in the Hydro movement. The present Chairman of the Hespeler Hydro-Electric Commission, Mr. L. E. Weaver, has been a member continuously since 1916.

With the close of the twenty-sixth year of operation, the total assets of the Hydro utility of the town of Hespeler are $209,839; the total liabilities $29,235; the reserves and surplus $180,604. The percentage of net debt to total assets is 22.7; rather more than three-quarters of the local distribution plant being thus debt free.

Included with the assets and with the surplus above noted is an amount of $81,097 which represents the sinking fund equity of the local utility in The Hydro-Electric Power Commission's Niagara system. This has been accumulated as part of the annual cost of power paid to the Commission.

On the diagram facing this page a graphical presentation is given of the progress made by the Hespeler Hydro Utility during the past twenty-five years. The present cost of service to consumers for a few representative billing demands and energy consumptions is given in the tabulation below.

PRESENT COST OF SERVICE

Monthly Bills for Representative Demands and Consumptions

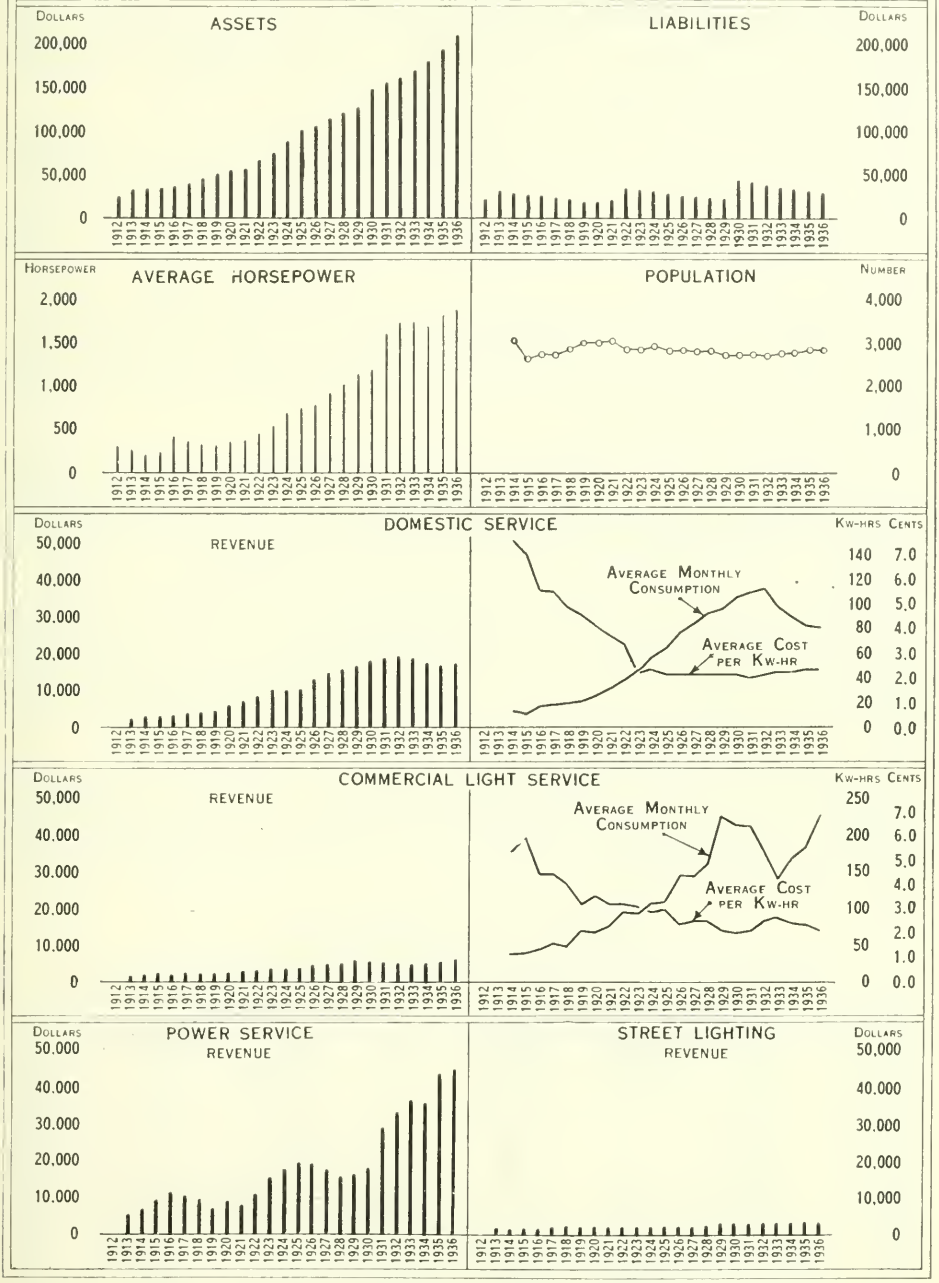
Domestic service		Commercial Light service			Industrial Power service		
Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill
kw-hrs	$ c.	kw	kw-hrs	$ c.	kw	kw-hrs	$ c.
25	0.75*	1	50	1.58	3	150	5.21
40	1.19	1	150	3.02	3	375	6.63
60	1.79	3	150	4.73	6	375	11.02
100	2.15	3	375	8.58	6	750	13.24
150	2.60	6	375	11.15	12	750	22.03
250	3.50	6	750	17.15	12	1,500	26.47
500	5.75	12	750	22.28	30	3,000	64.16
......	...	12	1,500	34.29	30	6,000	72.18
......		30	3,000	81.00	60	6,000	128.31
......		30	6,000	99.90	60	15,000	152.37

*Minimum bill.

MUNICIPAL **HYDRO** UTILITIES
TWENTY-FIVE YEARS RECORD
HESPELER

SERVICE FIRST TAKEN FEB. 1911

SYSTEM NIAGARA



NEW HAMBURG—Population 1,456

PUBLIC UTILITIES COMMISSION

The history of electrical power in New Hamburg is typical of that which characterizes many smaller progressive communities in Southern Ontario. It dates back to 1887 when a small dynamo was installed in a carriage shop. This was subsequently moved to a milling property and run partly by steam and partly by water power. About 1896 a plant was installed in a separate power house which has since been extended into the building now occupied by the New Hamburg Public Utilities Commission.

New Hamburg was a wholehearted supporter of the Hydro movement and in January, 1908, carried the power by-law by 152 to 31. The by-law authorized the acquisition of the existing electric plant and the construction of the necessary transmission lines. The original contract was for 250 horsepower.

Although but a relatively small community, the village of New Hamburg has 13 power consumers; 95 commercial consumers and 353 domestic consumers. The householder makes good use of the service and there have been installed 211 electric cooking devices and 230 electric washers as well as numerous other appliances.

With the close of the twenty-sixth year of operation, the total assets of the Hydro utility of New Hamburg are $97,964; the total liabilities $4,374; the reserves and surplus $93,590. The percentage of net debt to total assets is only 7.2. Thus with respect to its local distribution plant, the utility is nearly debt-free, the debenture balance being only $4,152.

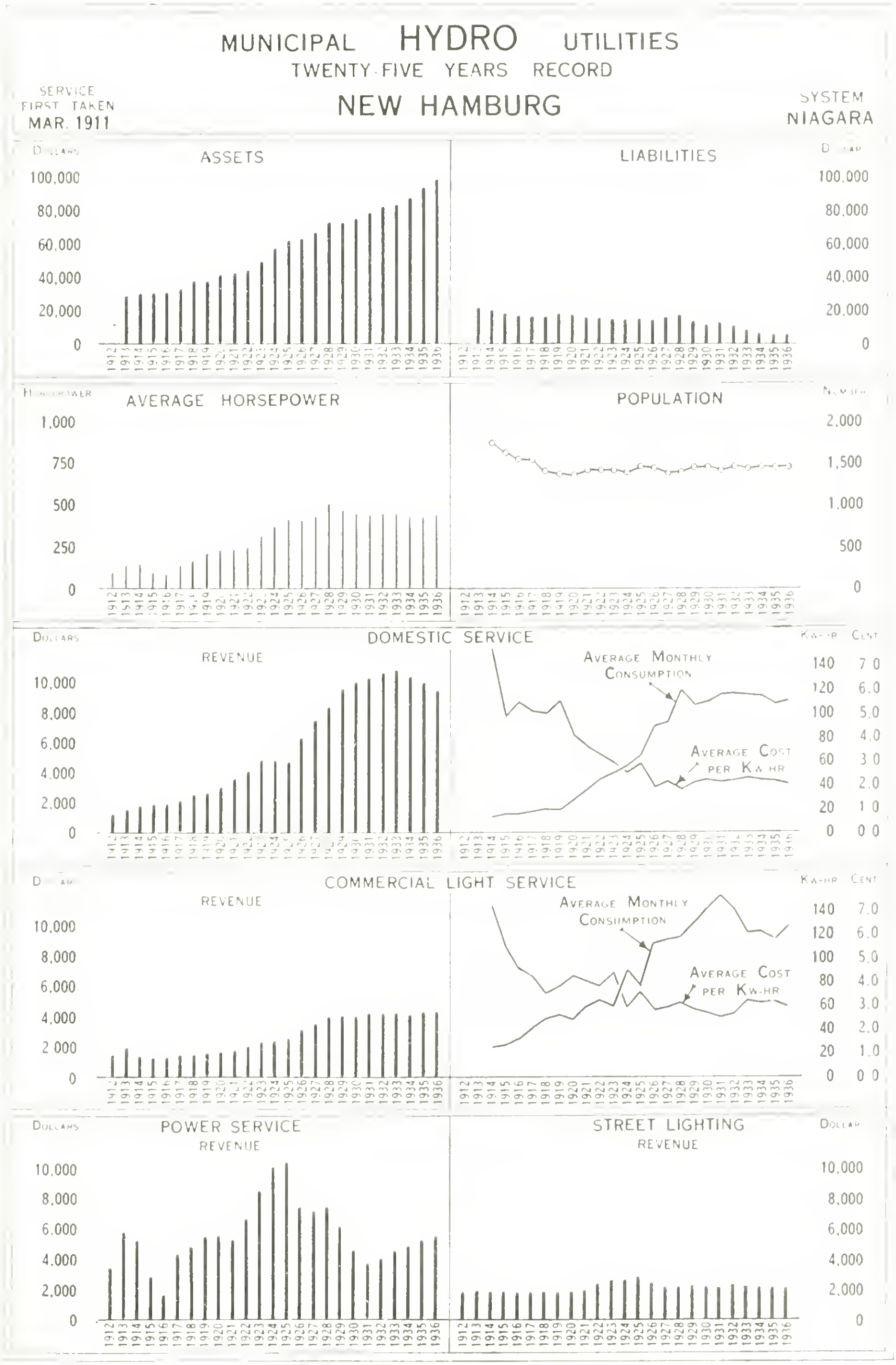
Included with the assets and with the surplus above noted is an amount of $37,347 which represents the sinking fund equity of the local Hydro utility in The Hydro-Electric Power Commission's Niagara system. This has been accumulated as part of the annual cost of power paid to the Commission.

On the diagram facing this page a graphical presentation is given of the progress made by the New Hamburg Hydro utility during the past twenty-five years. The present cost of service to consumers for a few representative billing demands and energy consumptions is given in the tabulation below.

PRESENT COST OF SERVICE

Monthly Bills for Representative Demands and Consumptions

Domestic service		Commercial Light service			Industrial Power service		
Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill
kw-hrs	$ c.	kw	kw-hrs	$ c.	kw	kw-hrs	$ c.
25	0.83	1	50	1.67	3	150	6.73
40	1.34	1	150	3.33	3	375	8.98
60	2.00	3	150	5.00	6	375	14.47
100	2.47	3	375	9.32	6	750	17.95
150	3.06	6	375	11.82	12	750	28.92
250	4.23	6	750	18.63	12	1,500	35.89
500	7.15	12	750	23.63	30	3,000	87.48
......	....	12	1,500	37.26	30	6,000	96.39
......	....	30	3,000	86.40	60	6,000	174.96
......	....	30	6,000	113.40	60	15,000	201.69


MUNICIPAL HYDRO UTILITIES
TWENTY-FIVE YEARS RECORD
NEW HAMBURG
SERVICE FIRST TAKEN MAR. 1911
SYSTEM NIAGARA
ASSETS
LIABILITIES
Dollars
100,000
80,000
60,000
40,000
20,000
0
AVERAGE HORSEPOWER
Horsepower
1,000
750
500
250
POPULATION
Number
2,000
1,500
1,000
500
DOMESTIC SERVICE
REVENUE
Average Monthly Consumption
Average Cost per Kw-hr
Kw-hr
Cent
10,000
8,000
6,000
4,000
2,000
140 7.0
120 6.0
100 5.0
80 4.0
60 3.0
40 2.0
20 1.0
0 0.0
COMMERCIAL LIGHT SERVICE
REVENUE
Average Monthly Consumption
Average Cost per Kw-hr
POWER SERVICE
REVENUE
STREET LIGHTING
REVENUE
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936

WATERDOWN—Population 912

PUBLIC UTILITIES COMMISSION

Waterdown was one of the small municipalities whose early desire for Hydro service was stimulated by the relative proximity of newly erected Hydro transmission lines. Furthermore, there was in the vicinity of the village an important clay products industry with an existing demand for low-cost power. These two possible markets for Hydro service mutually helped each other and made practicable the extension of transmission lines to both. Waterdown therefore, during the fall of 1911, signed a contract with the Commission for 50 horsepower, and enabling money by-laws were carried by substantial majorities.

With the close of the twenty-fifth year of operation, the total assets of the Hydro utility of the village of Waterdown are $53,528; the total liabilities $90; the reserves and surplus $53,438. The local distribution plant of Waterdown is therefore debt free. All its debentures have been paid.

Included with the assets and with the surplus above noted is an amount of $17,221 which represents the sinking fund equity of the local Hydro utility in The Hydro-Electric Power Commission's Niagara system. This has been accumulated as part of the annual cost of power paid to the Commission.

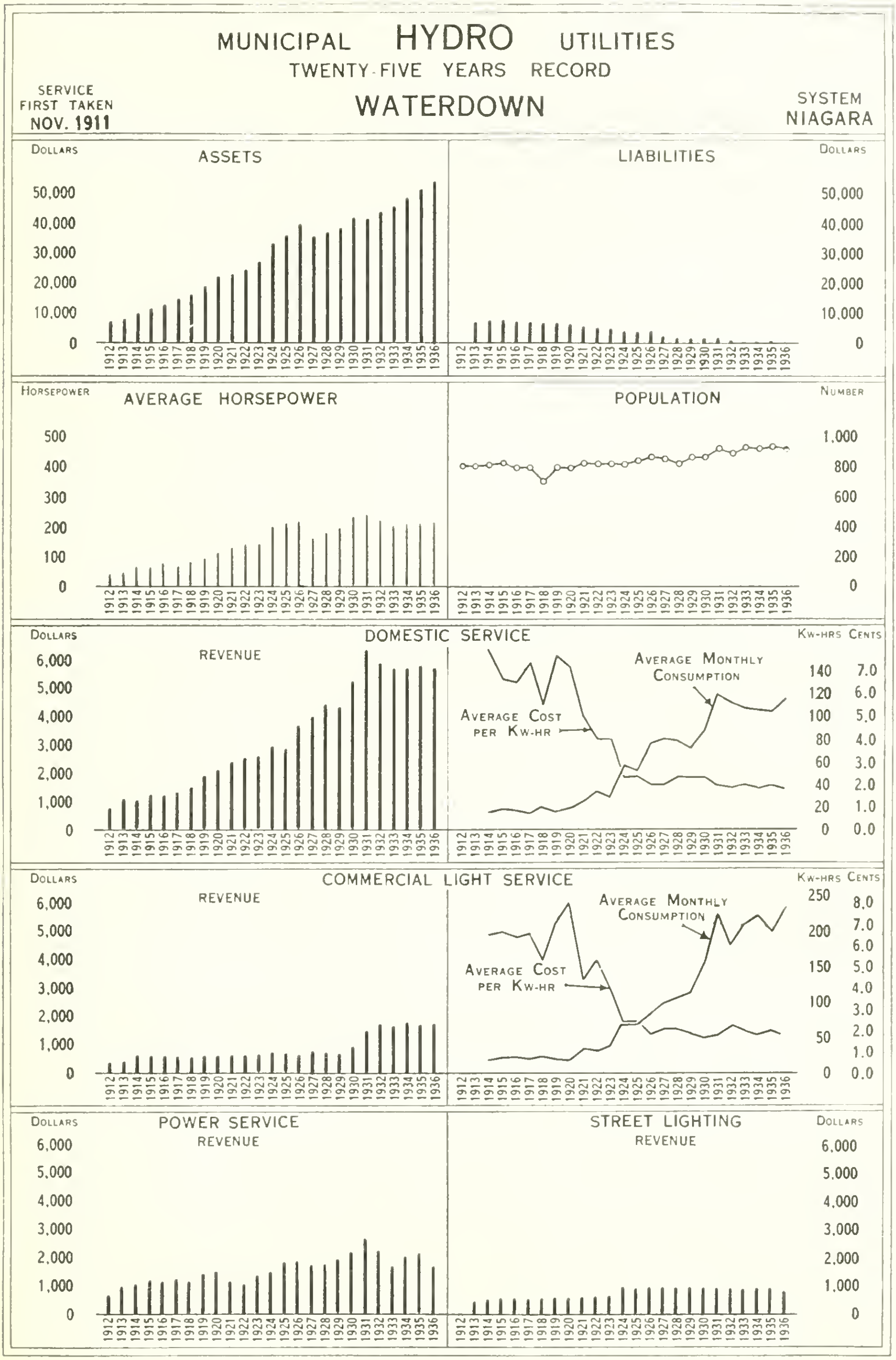
On the diagram facing this page a graphical presentation is given of the progress made by the Waterdown Hydro utility during the past twenty-five years. Although one of the smaller urban municipalities served by the Commission, Waterdown citizens receive service at rates which compare favourably with many larger centres of population. The present cost of power to consumers for a few representative billing demands and energy consumptions is given in the tabulation below.

PRESENT COST OF SERVICE

Monthly Bills for Representative Demands and Consumptions

Domestic service		Commercial Light service			Industrial Power service		
Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill	Billing demand	Energy consumption	Monthly bill
kw-hrs	$ c.	kw	kw-hrs	$ c.	kw	kw-hrs	$ c.
25	0.75*	1	50	1.44	3	150	5.58
40	1.05	1	150	2.75	3	375	7.36
60	1.57	3	150	4.32	6	375	11.93
100	1.97	3	375	7.77	6	750	14.70
150	2.46	6	375	10.13	12	750	23.85
250	3.45	6	750	15.53	12	1,500	29.39
500	5.93	12	750	20.25	30	3,000	71.45
		12	1,500	31.05	30	6,000	79.47
		30	3,000	72.90	60	6,000	142.89
		30	6,000	91.80	60	15,000	166.95

*Minimum bill.


MUNICIPAL HYDRO UTILITIES
TWENTY-FIVE YEARS RECORD
WATERDOWN
SERVICE FIRST TAKEN NOV. 1911
SYSTEM NIAGARA
Dollars
ASSETS
LIABILITIES
50,000
40,000
30,000
20,000
10,000
0
Horsepower
AVERAGE HORSEPOWER
500
400
300
200
100
POPULATION
Number
1,000
800
600
400
200
DOMESTIC SERVICE
REVENUE
6,000
5,000
4,000
3,000
2,000
1,000
Average Cost per Kw-hr
Average Monthly Consumption
Kw-hrs
Cents
140
120
100
80
60
40
20
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
COMMERCIAL LIGHT SERVICE
250
150
50
8.0
POWER SERVICE
STREET LIGHTING
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936

RECREATION FACILITIES AT PRESTON
Riverside Park

A NEW INDUSTRY AT WOODSTOCK
Firestone Cotton Mills Ltd.

AN OLD ESTABLISHED INDUSTRY AT HESPELER
Dominion Woollens & Worsteds Ltd.

A FACTORY AT NEW HAMBURG
The Hahn Brass Company

A MODERN MUNICIPAL BUILDING AT LONDON
Public Utilities Building and Civic Offices

RURAL ELECTRICAL SERVICE

IN ONTARIO

Rural electrical service has been studied by The Hydro-Electric Power Commission of Ontario since the earliest years of its existence. Early Annual Reports of the Commission bear witness to the attention paid to the possibility of supplying rural citizens and individual farmers with electric light and power in a form adapted to rural requirements. A clearer understanding of the present status of rural distribution in the Province may be gained by first noting the following general statements.

The Province of Ontario extends over a vast area of 400,000 square miles, the southern part of the Province commonly known as "Old Ontario", comprising most of the settled area. In this territory there is an assessed area of approximately 40,000 square miles containing about twenty-two million acres, of which 75 per cent is land cleared for agricultural purposes. The total rural population in this area exceeds 1,100,000.

The Commission estimates that within reasonable transmission distance of existing transmission lines and stations, about 65,000 farms may be served and that at the end of 1936, nearly one-half of these farms were receiving electrical service.

The distribution of power in, as well as the wholesale supply of power to, Ontario rural communities, is almost entirely carried out by The Hydro-Electric Power Commission. The Commission organizes service to consumers in townships or parts of townships which can be grouped into economic areas known as rural power districts, and in doing so acts as trustee and agent for the various townships of the Province.

There are 174 operating rural power districts and power is delivered to approximately 74,000 rural consumers, comprising farms and dwellings in various groups. The consumers are situated in 369 townships and 96 police villages and are served over networks of rural primary lines, which aggregate nearly 10,800 miles. In addition to the 369 townships served by rural power districts, 10 townships are served jointly by rural power districts and voted areas.

The benefits of rural electrical service are explained to prospective rural consumers by means of direct information given by the Commission's employees, by demonstrations at annual fairs and exhibitions and through the press. Frequent visits to larger centres of population have made the farmer familiar with the application of electrical appliances and machinery as a means of providing greater comfort in the home and freedom from the drudgery of certain farm work. Perhaps the most persuasive argument to the farmer is his knowledge of the benefits electrical service has brought to

RURAL ELECTRICAL SERVICE IN ONTARIO

Overhead irrigation on an Ontario farm. The pipe lines supported on posts are graded in size to maintain pressure throughout their length and equipped with small nozzles at three feet intervals. Each pipe line is rotated through an angle of approximately 90°, and with 30 lbs. pressure will irrigate a strip 50 feet wide, delivering approximately 3,000 gallons per acre per hour

his neighbor. Once the progressive farmer installs electrical service he does not rest content until he has secured additional equipment to enable him to obtain fuller advantages from the service. This process is doubly beneficial because, not only does it reduce the average cost of electricity to the individual farmer, but it tends towards securing lower rates throughout the district. The aim of the Commission and of the rural consumer should be the maximum use of the power made available so that the average cost to the consumer may be suitable to the economic conditions of farm life.

The Commission desires, in every reasonable way, to encourage the more liberal use of electrical service in rural areas, especially by the farmers. Under the policy of service at cost, combined with the substantial contributions of the Province to aid rural electrical service, the Ontario farmer receives service at an exceptionally low cost. Beginning December 1, 1936, the present service charge to Class 2B—Farm Service, Small—and to Class 3—Farm Service, Light—will be reduced to one dollar net per month, which is a reduction of about 50 per cent from the present standard service charges. Medium, Heavy and Special farm service will receive service charge reductions of 25 per cent from the standard rates.

The Commission has observed that quite a large proportion of consumers in rural power districts fail to make much more than a minimum use of the service and do not appear to appreciate fully how much more service can be obtained by a comparatively small addition to their monthly bills. Efforts are being made to explain this and other features of Hydro service to the farmer in ways which will appeal to him. Based upon the unit cost of distribution facilities to individual consumers, the service charge to the farmer is necessarily higher than in the city, but the number of kilowatt-hours charged for at his first energy rate is usually smaller than in cities, towns and villages. Consequently, a very moderate use of energy brings him into the position where additional energy can be obtained for the low follow-up rates in force.

Uses for Electricity

Each year the progressive farmer of Ontario finds many new uses for electrical service. It would be impossible in this Report to describe these at length, but they may be classified under the following heads:

Lighting Service—Electric lighting is safe, convenient and time saving. It adds to the comfort and attractiveness of the farm home and reduces fire hazard to a minimum. Against the cost of energy for lighting may be set the cost of coal oil or candles. Even at 6 cents per kilowatt-hour, a 40-watt lamp can be operated nearly 24 hours for 5 cents.

The progressive farmer is using controlled lighting for increasing the production of eggs and, what is more important from the viewpoint of financial returns, obtaining a greater proportion of the annual egg yield during the months when prices are high.

Power Service—Next to lighting the energy used for mechanical purposes gives the most valuable service for the money expended for electricity.

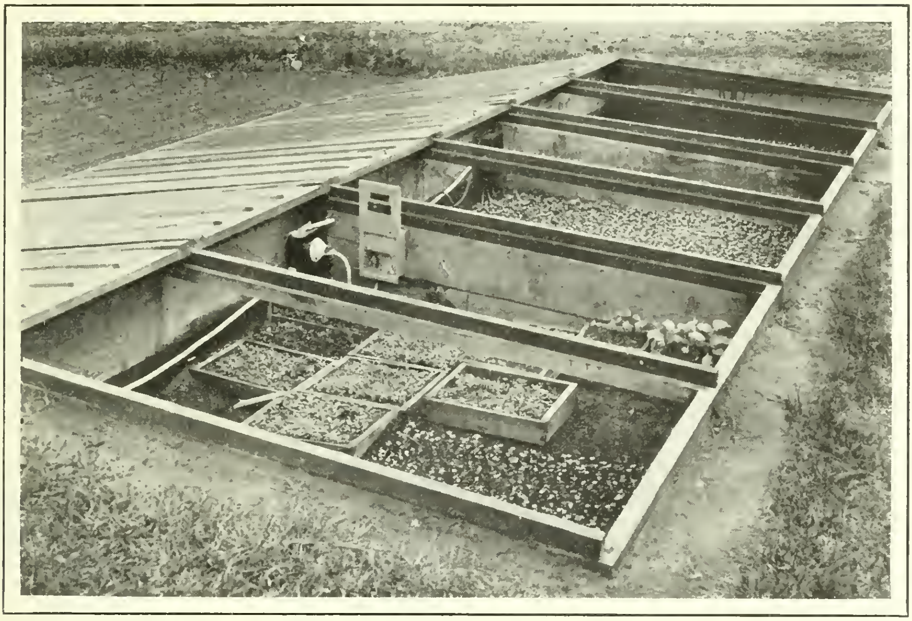
In the farm home washing machines, vacuum cleaners, fans and furnace blowers contribute to making the farm home equal in comfort to one in the city. Motor-driven pumps supply water for sanitary systems and general house and farm use.

In the barn, dairy and workshop of the farm, electric motors may be employed for chopping feed, wood cutting, hay hoisting, milking, cream separating, churning and the many purposes of the farm workshop. Electric milking machines reduce labour at milking time to one-half and their regular use increases the milk flow and fat content.

The Commission supplies free energy for operating washing machines and pumps for the use of water under pressure for sanitary purposes. With energy at the 2-cent per kilowatt-hour rate, a ¼-horsepower motor can be operated at full load for three hours for 1 cent. As actually used in motor-driven appliances, the motors frequently operate at less than full load or, under automatic operation as in pumping and refrigeration, for only 25 to 50 per cent of the 24 hours.

Electric Refrigeration—This is a special application of power service. Its use promotes health and comfort and reduces food losses. Ice obtained from neighbouring ponds is frequently contaminated and has endangered the health of many farm dwellers. Electric refrigeration is of special assistance in connection with dairy operations. The farmer can accumulate his separated cream for a few days with safety and can improve the marketing quality of his milk by cooling. It is also useful in egg storage.

Heating Service—Under this head come: the minor appliances of hand irons, toasters, and hot plates, which owing to their intermittent use consume relatively small quantities of electricity per month; the major heating appliances of ranges and water heaters which need relatively large quantities of energy for their operation, and the special applications of electricity



RURAL ELECTRICAL SERVICE IN ONTARIO

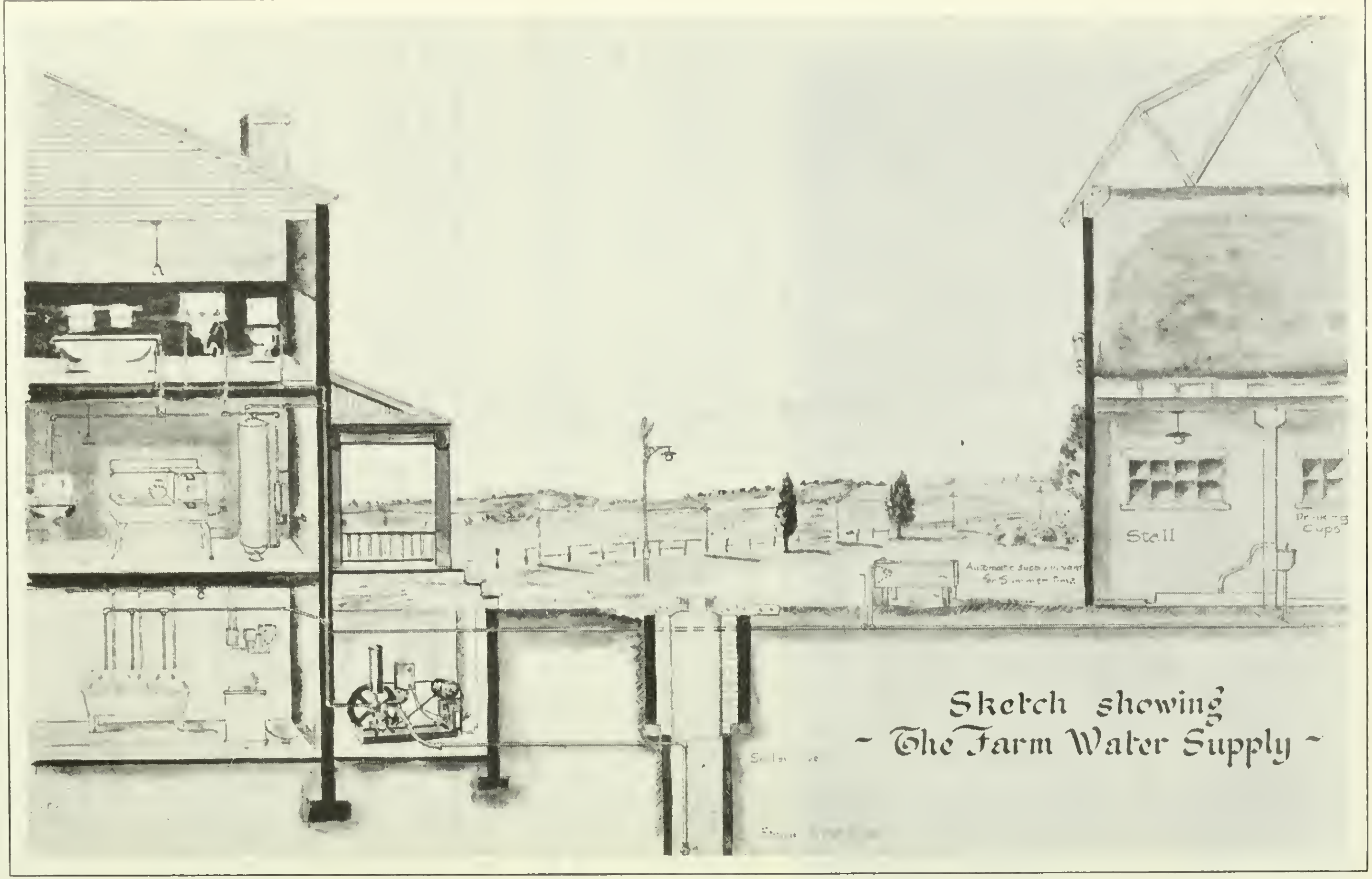
A well-constructed electric hotbed, 6 ft. x 18 ft., on an Ontario farm. The 6 ft. x 6 ft. section in foreground is equipped with 100 watts per square yard for germination of celery seed, the seedlings are transferred to other sections of bed equipped with 50 watts per square yard. Temperatures automatically controlled

for incubating, brooding, etc., and for soil heating which only becomes economically profitable when the current used is available at specially low rates.

The electric range, although a heavy user of current, is efficient and the cost of operation is more than offset where the farmer can more profitably employ his time than in hauling and chopping wood for the stove. It is safer and in summer provides cool cooking in comfort for the farmer's wife and also leaves her free to undertake more profitable work.

Entertainment Service—Radio—Radios provide entertainment, general information and a familiarity with current events and market prices which have done much to make life on the farm more attractive and profitable. The Commission provides free energy to all rural consumers to operate licensed alternating-current radios. The many applications of power in a farm workshop will provide countless hours of profitable recreation and pleasure.

Miscellaneous—The miscellaneous applications of electricity seem only to be limited by the ingenuity of the farmer in adapting this modern flexible agent to his various needs. It is used when spraying against insects and to paint the barn, for incubating, brooding and for the control of humidity and ventilation in connection with poultry raising, to prevent the freezing of vegetables, to cook supplementary food for hogs and in countless other ways.


Sketch showing
~ The Farm Water Supply ~
Stall
Drinking Cups
Automatic supply in yard for Summer time

RURAL ELECTRICAL SERVICE IN ONTARIO

A complete automatic water system for farm water supply to the house, barn and water trough, provides all the conveniences of water service that city dwellers enjoy. The above sketch shows a complete layout, excepting the tank and effluent disposal, which must be located in an area remote from the well

Recent Benefits to Rural Consumers

Reduced Service Charges Effective December 1, 1936

During the year, extensive studies were made in order to ascertain whether the service charge to farmers might be further reduced in order to promote the agricultural industry, and it was concluded that a further reduction in the fixed charge associated with the capital investment, could be made to an extent which would permit a reduction in the monthly service charge to farmers only. Rural consumers not identified with agriculture do not receive this further reduction. The following table compares the new and the former maximum service charges:

Class of consumer	Service	Former maximum net Service Charge per month in force since Nov., 1935	New maximum net Service Charge per month in force on Dec. 1, 1936	
			Non-farm	Farm*
		$ c.	$ c.	$ c.
1B	Hamlet lighting	1.20	1.20	...
1C	Hamlet lighting, plus range	1.90	1.90	...
2A	House lighting	1.40	1.40	...
2B	Small farm service	1.90	1.90	1.00
3	Light farm service	2.00	2.00	1.00
4	Medium farm service (one phase)	2.15	2.15	1.61
5	Medium farm service (three phase)	3.00	3.00	2.25
6A	Heavy farm service (one phase)	3.70	3.70	2.77
6B	Heavy farm service (three phase)	4.25	4.25	3.19
7A	Special farm service (one phase)	5.55	5.55	4.16
7B	Special farm service (three phase)	6.70	6.70	5.02

*A "Farmer" is considered as a customer owning and operating farm land, 5 acres or more, and producing farm products for sale from the land so occupied.

Free Service

The free current given in 1934 and 1935 to operate electric washing machines, electric pumps to provide water under pressure for household sanitary systems, and licensed alternating-current radios, was continued during the year. This arrangement will continue to October 31, 1937.

Maximum Consumption Charge

The Commission has found that the maximum economic limit of the first domestic use throughout the rural power districts of the Province is 6 cents per kilowatt-hour. In all rural power districts where the first consumption rate exceeded 6 cents per kilowatt-hour, this rate therefore was reduced to a maximum of 6 cents per kilowatt-hour. The maximum second rate of 2 cents per kilowatt-hour applies to all districts.

New Low Third Consumption Rate for Long-Hour Users

In 1934 the Commission made available for rural consumers a special energy rate for long-hour uses of power by rural consumers. This particularly affects under-earth heating (hot-beds) and heating of water. Where the extra use of energy may be obtained from the present equipment, a third follow-up rate per kilowatt-hour of 0.75 cents gross, is given in all districts. The first rate remains unchanged, except that as pointed out above it is subject to a maximum of 6 cents per kilowatt-hour, and the kilowatt-hours to be charged at the first rate remain unchanged. The number of kilowatt-hours to be charged at the second rate varies both with the class of service and the first kilowatt-hour rate. At the head of the table of rural rates at the end of this section, is a schedule which shows the class of service, the number of kilowatt-hours per month to be charged for at the first rate, and the number of kilowatt-hours at the second rate according to the governing first rate.

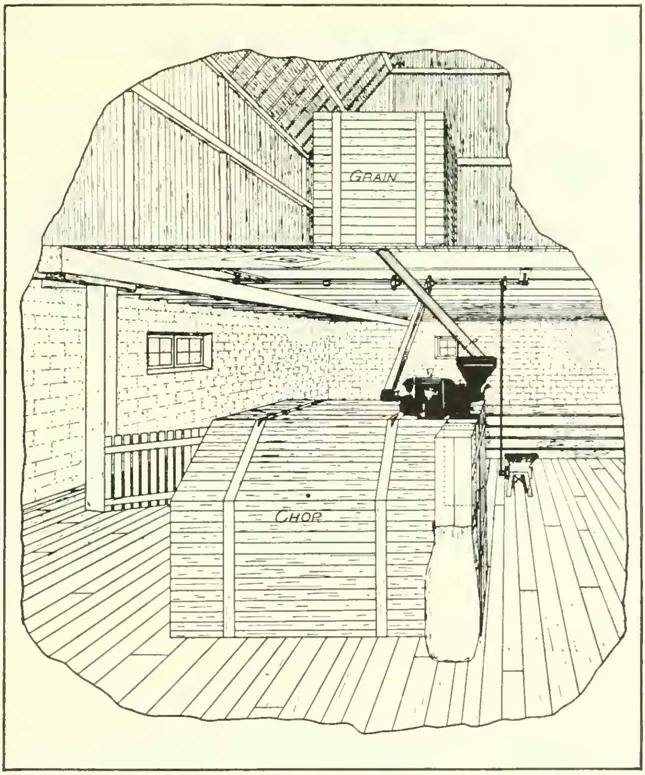
Provincial Government Aids Rural Electrical Service

Assistance respecting electrical service is given by the Province to farmers and rural residents in three ways, namely:

First—A "grant-in-aid" toward the initial capital cost of supplying electrical service, amounting to 50 per cent of the cost of line and secondary equipment necessary to deliver power from the supply point of the Commission's stations or of a city, town, village, etc., to the customer's property. This is the maximum amount provided for by *The Rural Hydro-Electric Distribution Act.*

Second—Authority was granted to the Commission by the Province in *The Rural Power District Service Charge Act*, 1930, to fix a maximum service charge for any class of service in a rural power district. Where as may be the case in newly-established rural power districts such maximum service charge is not sufficient to meet the necessary cost of service, as specified by the Commission, the deficit is chargeable to and payable out of the Consolidated Revenue Fund of the Province. Payments made out of the Consolidated Revenue Fund for this purpose, on account of any rural power district, are charged to that rural power district in a special account—known as the "Rural Power Service Suspense Account"—in the books of the Treasurer of Ontario, and any surplus thereafter arising from any maximum service charge in that rural power district is paid to the Treasurer of Ontario and placed to the credit of the rural power district in such suspense account until the deficit is wiped out. Where a temporary deficit arises in any rural power district owing to the application of the maximum service charge, such maximum service charge must remain in force and be charged in that rural power district until the deficit is wiped out.

Third—An Act—*The Rural Power District Loans Act*, 1930—to provide for granting aid towards the installation of electrical works in rural power districts was passed in 1930. The purpose of the Act is to provide, subject to regulations, advances toward the installation of electrical services in rural power districts. Aid may be granted for the wiring from the transmission or distribution lines of the Commission into and throughout dwellings, farms,



RURAL ELECTRICAL SERVICE IN ONTARIO

The utility-motor chopper set up as shown, permits chopping to be done while the operator is otherwise employed in the barn. The line shafting, when belted to the motor, will supply power for many other machines used in the barn

out-houses, and any other works which may from time to time be specified by the regulations. In addition to the wiring, loans may be obtained on transformers, motors, or other appliances, as may be necessary or expedient for any industrial, agricultural or domestic purpose which may be specified in the regulations.

Rural Loans

Under *The Rural Power District Loans Act, 1930,* authority was given to The Hydro-Electric Power Commission of Ontario, to finance the installation of wiring and the purchase of specified electrical farm equipment by rural farm consumers.

As all applications for loan are governed by regulations made subject to the provisions of the Act, quite a number fail to meet the requirements of these regulations, so that out of the total of 1,144 applications received to date only 834 have been approved, involving an outlay of $172,532.

During the fiscal year ending October 31, 1936, there were received 307 applications and 212 loans were made totalling $40,550. The Commission refused 22 applications and 68 did not fulfil the requirements. At the end of the year there were 14 applications in process of being investigated, 4 having been approved by the Commission were awaiting cheques and 10 awaiting receipt of final papers.

To October 31, 1935, 135 loans had been repaid in full, either through the maturing of the loan or because of the improved financial position of the borrower.

LOANS GRANTED TO CONSUMERS IN RURAL POWER DISTRICTS

System	Total to Oct. 31, 1935		Nov. 1, 1935, to Oct. 31, 1936		Total to Oct. 31, 1936	
	No.	Amount	No.	Amount	No.	Amount
		$		$		$
Niagara	484	95,305	205	39,105	689	134,410
Georgian Bay	105	28,132	3	580	108	28,712
Eastern Ontario	27	7,150	4	865	31	8,015
Thunder Bay	1	335			1	335
Manitoulin	5	1,060			5	1,060
All systems	622	131,982	212	40,550	834	172,532

The average loan is $206.87.

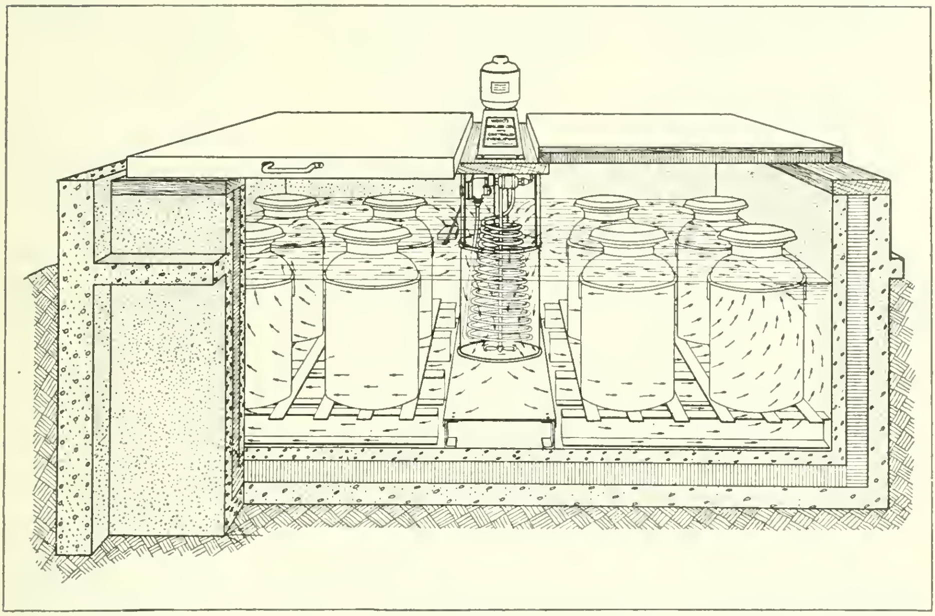
DETAILS OF RURAL LOANS GRANTED TO OCTOBER 31, 1936

Items applied for (including installation) in loans which have been made	Totals for 622 loans made to Oct. 31, 1935		For 212 loans made during year ended Oct. 31, 1936		Totals for 834 loans made to Oct. 31, 1936	
	Number affected	Cost to consumers	Number affected	Cost to consumers	Number affected	Cost to consumers
		$ c.		$ c.		$ c.
Service	217	11,741.79	58	3,368.49	275	15,110.28
House wiring	214	20,308.73	59	4,503.94	273	24,812.67
Building wiring	224	18,078.07	55	3,601.57	279	21,679.64
Motors	44	4,527.96	2	243.00	46	4,770.96
Grain grinders	381	71,693.72	130	27,067.25	511	98,760.97
Pumping systems	34	4,243.32	19	2,687.13	53	6,930.45
Milking machines	7	1,766.00	1	300.00	8	2,066.00
Washing machines	31	3,281.00	1	115.00	32	3,396.00
Milk coolers	9	1,845.00	15	3,108.00	24	4,953.00
Totals		137,485.59		44,994.38		182,479.97

Respecting the 834 loans made to October 31, 1936, the following table shows the number of loans made for each term of years:

One year term	13 loans	Six year term	10 loans
Two " "	19 "	Seven " "	79 "
Three " "	93 "	Eight " "	9 "
Four " "	22 "	Nine " "	0 "
Five " "	551 "	Ten " "	38 "

During the past year there have been no loans made for periods longer than 5 years.

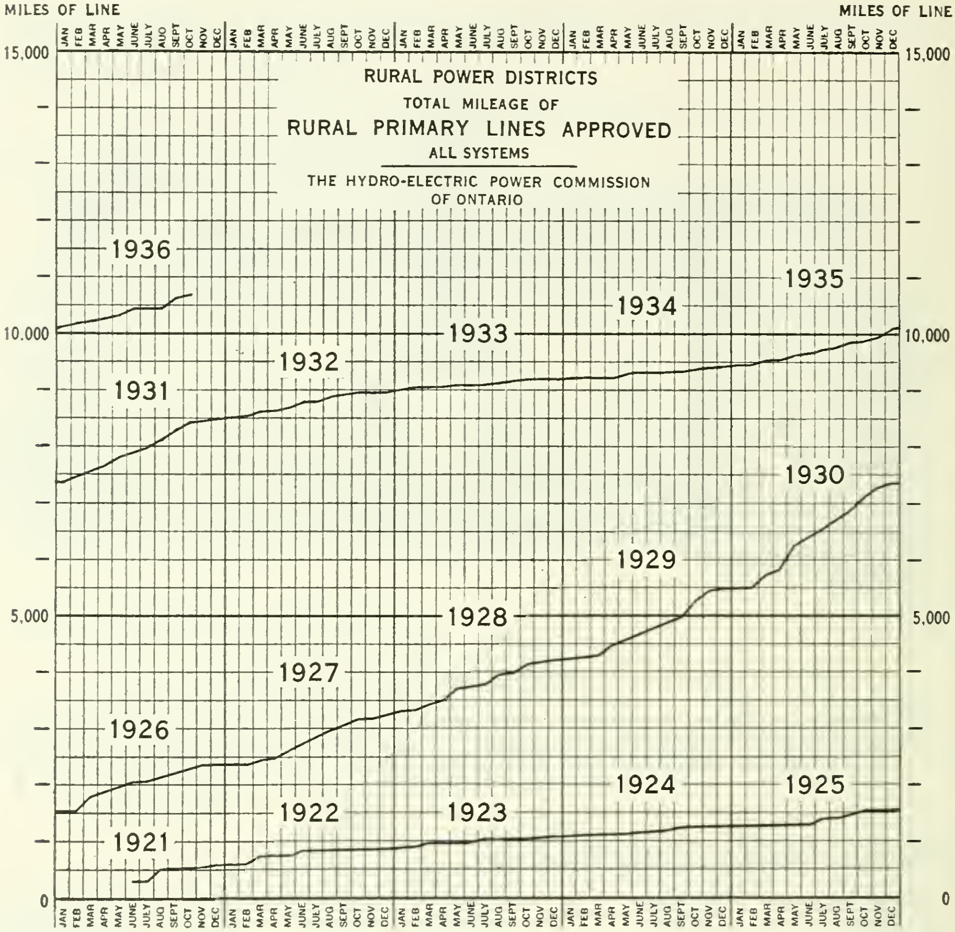


RURAL ELECTRICAL SERVICE IN ONTARIO

Milk cooling by electric refrigeration with agitation is now being used by progressive Ontario farmers to their economic advantage. It is reported that this method of cooling is less expensive, more reliable and certainly cleaner than ice

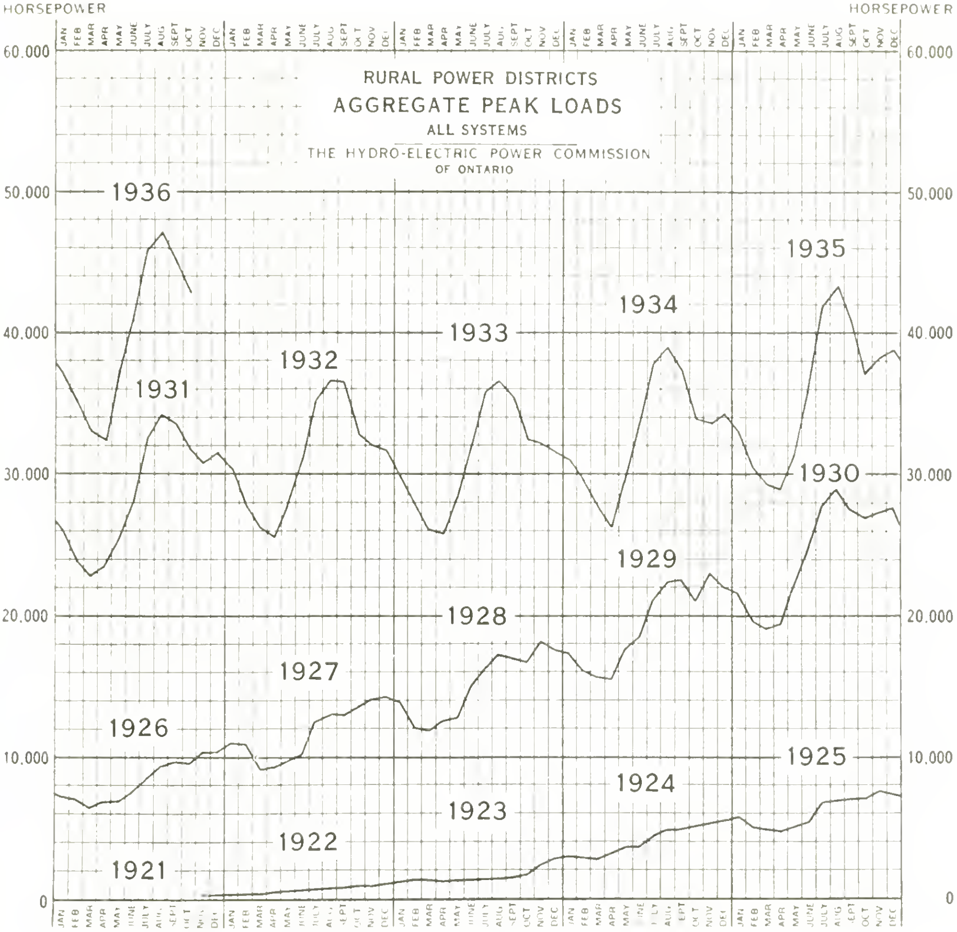
Provincial Assistance to Rural Consumers

The extent and effect of the Province's financial assistance with respect to the distribution of power in rural districts should be clearly understood. The Government grant-in-aid relates solely to the initial capital investment for distribution facilities in rural power districts. Having made its grant-in-aid the Government further participates in the operation of each district in that it guarantees a maximum service charge, otherwise its participation in the operation of the property ceases. Each rural power district pays the cost of operation, maintenance and administration of its lines. The Commission also set up, until October 31, 1935, reserves for renewals, (depreciation) obsolescence and contingencies on the whole of the equipment and lines, as well as sinking fund on the investment made by the Commission on behalf of the townships served. Beginning November 1, 1935, however, no further provision will be made for contingencies as it is considered that the present accumulated contingency fund is sufficient to take care of this situation; similarly the renewals (depreciation) charges have been reduced by one-eighth for the year 1936 and one-half for the year 1937 and until further consideration is given to the problem.



RURAL LINE EXTENSIONS APPROVED BY THE COMMISSION DURING THE YEAR 1936

System	Miles of primary line	Net increase in number of consumers			Power supplied in October, 1936	Capital approved for extensions	
		Hamlet	Farm etc.	Total		Total	Provincial grant-in-aid
					h.p.	$ c.	$ c.
Niagara	485.51	1,221	2,187	3,408	32,570	1,342,224.00	671,112.00
Georgian Bay	144.35	704	384	1,088	3,043	369,880.00	182,365.00
Eastern Ontario	174.25	591	626	1,217	6,839	422,836.00	211,418.00
Thunder Bay	4.28	34	7	41	180	11,208.00	5,604.00
Manitoulin R.P.D.	....	11	2	13	138	960.00	480.00
Northern Ontario Properties:							
Nipissing District	1.25	41	4	45	127	6,688.00	3,344.00
Totals	809.64	2,602	3,210	5,812	42,897	2,153,796.00	1,074,323.00



SUMMARY OF RURAL LINE EXTENSIONS

As Approved by the Commission from June 1, 1921, to October 31, 1936, Constructed or Under Construction

System	Miles of primary line	Number of consumers			Capital approved for extensions	
		Hamlet	Farm, etc.	Total	Total	Provincial grant-in-aid
					$ c.	$ c.
Niagara	7,578 53	25,263	26,257	51,520	17,162,477 89	8,557,958 94
Georgian Bay	1,100 85	5,459	2,407	7,866	2,365,150 95	1,134,882 49
Eastern Ontario	1,985 93	8,127	5,085	13,212	4,474,445 31	2,237,222 65
Thunder Bay	85 93	173	183	356	159,222 00	79,611 00
Manitoulin R.P.D.	37 25	164	25	189	65,538 00	32,769 00
Northern Ontario Properties:						
Nipissing District	19 37	420	51	471	66,063 00	33,031 50
Totals	*10,807.86	39,606	34,008	73,614	24,292,897 15	12,075,475 58

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*This total includes 170.69 miles of primary line under construction on October 31, 1936, required to serve 604 new consumers.

Rates for Rural Electrical Service

Rates to rural consumers are based upon service "at cost"—account being taken of the Provincial "grant-in-aid" for rural work and the operation of the provision for a maximum service charge—and as in urban centres the rates are made up of two parts, a service charge and a consumption charge. In any rural power district the service charge to a consumer depends primarily upon the individual connected load or demand which determines his class rating (see "Classification of Services") but this is modified in the earlier years of operation of a rural power district by the provision respecting maximum service charge; the consumption charge is based upon a first, second and third kilowatt-hour rate, the first and second rate being determined by the cost of power at the source of supply to the rural power district, and the third rate is the same for all consumers.

For the purpose of determining the service charge, each mile of line is assumed to represent a minimum of 15 units and to each class of service is assigned a value in such units. The table on page 91 gives the new maximum net service charge per month applicable to each class of service. More than 90 per cent of the contracts entered into for farm service are either Class 2B or Class III. These, therefore, are the representative classes for individual farm service.

Rather more than half the consumers in rural power districts are grouped in hamlets or small villages closely identified with rural activities, and these consumers are usually in Class 1B or Class IC. It is pointed out that rural power districts do not include suburban districts or larger villages. These have their own electrical utilities.

Usually new rural power districts begin at standard rural rates and these constitute the maximum rates submitted to the proposed consumers. As the average number of consumers per mile of line increases, the service charges may be, and in practice have been, reduced; and with increased consumption the rates per kilowatt-hour are also lowered. Thus, in older-established rural power districts the total cost of service is much below the initial standard rates.

The lowering of the maximum service charges has, however, resulted in more uniform and more nearly equal costs to the respective classes of consumers in practically all rural power districts served by the Commission. These maximum rural service charges, under prevailing conditions, do not cover the costs incurred to serve rural consumers. It is anticipated, however, that the increase in the number of consumers served per mile, and increased use of power by all rural consumers, will enable the Commission more nearly to meet all costs. In rural power districts where this condition cannot be obtained, deficits arising out of the application of the maximum service charge will be paid by the Province of Ontario as a loan until the rural power districts concerned operate with a surplus.

Contracts with Consumers

For many years power agreements made between rural customers and townships were for a twenty-year period. When rural power service was inaugurated on a principle of service at cost, this period was considered advisable for all rural contracts in order to protect the interests of the rural consumers themselves, as partners embarking in an undertaking involving collective responsibility for a substantial capital investment, to be liquidated over a period of years. The contract provision thus constituted, as between consumers, a mutual guarantee with respect to service charges. Without such assurance extensions in the early years would have been greatly hampered.

As the number of consumers on the rural lines constructed increased and rural consumers, generally, throughout the Province became better informed as to the possible uses of electric power on the farm, rural electrical service became well established.

In 1934 the Commission announced that a recommendation had been made to all township municipalities that they should pass a by-law, authorizing the Commission to reduce the term of existing and future rural contracts from twenty to five years in certain cases. These contracts were to continue in force from year to year after the expiration of the five-year period.

It is provided, however, that this change in contract term shall not take effect unless and until the Councils of all the various townships forming part of each rural power district pass by-laws approving such amendment in existing and future rural power contracts.

A consumer, who has a loan under *The Rural Power District Loans Act*, shall not be entitled to avail himself of cancellation of his rural contract with the township until after all obligations under the said loan have been discharged.

This change in term of contract does not apply to "guarantee" contracts.

At the end of 1936, all townships, excepting two, had passed the necessary by-law, and five-year agreements are available in most rural power districts. The two townships concerned have not passed this by-law due to conditions which require further consideration.

At the end of this section a tabulation of the rural power districts shows the miles of line, the number of consumers and the rate schedules for each district of the several systems.

RURAL POWER DISTRICTS—MILES OF LINE, NUMBER OF CONSUMERS AND RATES

Rates shown in this table became effective December 1, 1936. Miles of line and number of consumers as at October 31, 1936

NIAGARA SYSTEM

Rural power district	Property number	Miles of line	No. of consumers	Rural rates: Class 1B	1C	2A	2B	3*	4	5	6A	6B	7A	7B	Gross consumption charges per kilowatt-hour: First energy rate	Second energy rate	Rate for all additional	Prompt payment discount on gross bill
Monthly consumption charged for at first energy rate: No. of kw-hrs. per month				30	30	30	30	**42**	70	70	126	126	210	210				
Monthly consumption charged for at second energy rate: No. of kw-hrs. where first energy rate is less then 3 cts				120	270	120	270	**258**	430	430	774	774	1290	1290				
3 cts				105	240	105	240	**228**	380	380	684	684	1140	1140				
3.1 to 4 cts				75	180	75	180	**168**	280	280	504	504	840	840				
4.1 to 5 cts				60	150	60	150	**138**	230	230	414	414	690	690				
more than 5 cts				45	120	45	120	**108**	180	180	324	324	540	540				
Maximum gross monthly service charge to farmers†				$ c.	$ c.	$ c.	$ c. 1.11	$ c. 1.11	$ c. 1.79	$ c. 2.50	$ c. 3.08	$ c. 3.54	$ c. 4.62	$ c. 5.58				
Gross monthly service charge to consumers other than farmers				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	cents	cents	cents	%
Acton	N5 D1	11.18	35	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Ailsa Craig	N4 D7	5.59	17	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Alvinston	N18 D9	10.60	17	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Amherstburg	N15 D3	74.39	649	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	3.5	2	0.75	10
Aylmer	N11 D2	140.03	774	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4.5	2	0.75	10
Ayr	N12 D4	27.26	104	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Baden	N7 D1	115.83	536	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Beamsville	N44 D3	180.34	1,661	1.13	1.80	1.32	1.80	**1.89**	2.03	2.83	3.50	4.01	5.24	6.33	3	1.5	0.75	10
Belle River	N15 D2	46.25	404	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	4	2	0.75	10
Blenheim	N14 D3	70.50	372	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Bond Lake	N3 D3	185.33	1,853	1.10	1.80	1.32	1.80	**1.89**	2.03	2.83	3.50	4.01	5.24	6.33	3	1.5	0.75	10
Bothwell	N14 D10	42.05	166	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Brampton	N13 D2	60.76	191	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Brant	N12 D1	123.63	679	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Brigden	N18 D8	37.57	124	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Burford	N12 D2	55.57	299	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4.5	2	0.75	10
Caledonia	N2 D5	113.43	608	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Chatham	N14 D1	171.06	939	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Chippawa	N1 D7	31.16	206	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Clinton	N8 D11	70.61	404	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10

Delaware	N4	D3	145.94	722	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Dorchester	N4	D1	120.18	656	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Dresden	N14	D12	31.50	103	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Drumbo	N12	D5	65.70	305	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Dundas	N2	D1	143.00	869	1.30	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.25	0.75	10
Dunnville	N1	D9	22.28	133	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
					1.00	1.86	1.38	1.86	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Dutton	N11	D3	50.82	199	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Elmira	N7	D3	26.05	99	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Elora	N5	D4	56.04	294	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Essex	N15	D7	99.34	506	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4.5	2	0.75	10
Exeter	N4	D6	71.35	714	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Forest	N18	D6	54.28	215	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Galt	N6	D2	42.58	357	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Georgetown	N5	D2	61.31	298	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Goderich	N8	D2	51.27	209	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Grantham	N44	D1	64.67	892	1.00	1.50	1.26	1.86	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Guelph	N5	D3	107.35	647	‡1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Haldimand	N2	D8	89.11	412	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4.5	2	0.75	10
Harriston	N8	D5	24.05	64	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Harrow	N15	D4	71.83	695	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	4.5	2	0.75	10
Ingersoll	N10	D3	187.23	652	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5.5	2	0.75	10
Jordan	N44	D2	44.44	429	1.06	1.86	1.38	1.86	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Keswick	N3	D5	64.43	1,202	1.20	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Kingsville	N15	D5	145.96	1,555	1.00	1.69	1.24	1.69	**1.78**	1.91	2.67	3.29	3.78	4.93	5.96	3	2	0.75	10
Listowel	N8	D8	82.35	368	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
London	N4	D2	206.86	2,389	0.90	1.59	1.14	1.59	**1.67**	1.79	2.50	3.09	3.54	4.62	5.59	3	1.5	0.75	10
Lucan	N4	D5	45.43	152	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Lynden	N2	D2	69.41	286	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Markham	N3	D1	140.52	1,064	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	4	2	0.75	10
Merlin	N14	D15	98.79	370	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Milton	N13	D3	78.88	375	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Milverton	N8	D9	50.11	205	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Mitchell	N8	D7	70.11	365	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4.5	2	0.75	10
Newmarket	N3	D4	80.47	464	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Niagara	N1	D1	52.05	337	1.20	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10

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†A "Farmer" is considered as a customer owning and operating farm land, 5 acres or more, and producing farm products for sale from the land so occupied. ‡Service charge $1.20 in suburban area.

RURAL POWER DISTRICTS—MILES OF LINE, NUMBER OF CONSUMERS AND RATES

NIAGARA SYSTEM—Continued

Rural power district	Rural rates																
	Class			1B	1C	2A	2B	3*	4	5	6A	6B	7A	7B	Gross consumption charges			Prompt payment discount
	Property number	Miles of line	No. of consumers	Gross monthly service charge to consumers other than farmers											First energy rate‡	Second energy rate‡	Rate for all additional	
				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	cents	cents	cents	%
Norwich	N10 D1	133.64	605	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Oil Springs	N18 D3	21.14	115	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Palmerston	N8 D6	39.14	121	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Petrolia	N18 D5	18.31	80	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Preston	N6 D1	160.17	1,194	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.25	0.75	10
Ridgetown	N14 D2	109.30	742	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
St. Jacobs	N7 D2	72.59	410	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
St. Marys	N9 D1	127.44	479	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
St. Thomas	N11 D1	174.72	1,218	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Saltfleet	N17 D1	99.15	1,751	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	3	1.5	0.75	10
Sandwich	N15 D1	133.32	2,073	1.00	1.69	1.24	1.69	**1.78**	1.91	2.67	3.29	3.78	4.93	5.96	3.5	1.5	0.75	10
Sarnia	N18 D4	97.05	1,391	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	3.5	2	0.75	10
Scarboro	N3 D2	95.93	1,011	1.13	1.80	1.32	1.80	**1.89**	2.03	2.83	3.50	4.01	5.24	6.33	4	2	0.75	10
Seaforth	N8 D10	17.56	156	1.10	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Simcoe	N12 D6	85.36	467	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Stamford	N44 D4	8.77	303	1.30	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Stratford	N8 D4	37.97	239	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Strathroy	N4 D4	84.80	256	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Streetsville	N13 D1	112.71	516	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Tavistock	N8 D1	100.52	362	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Thamesville	N14 D11	75.09	302	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Tilbury	N14 D14	96.22	374	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Tillsonburg	N10 D4	138.53	703	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3.5	2	0.75	10
Wallaceburg	N14 D13	106.24	646	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Walsingham	N12 D7	160.77	774	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Walton	N8 D3	47.78	292	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Waterdown	N2 D3	72.48	1,014	1.20	1.89	1.39	1.89	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	2.5	1	0.75	10
Waterford	N12 D3	85.40	374	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Watford	N18 D7	17.55	58	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10

Welland	N1 D5	288.87	2,920	1.00	1.87	1.38	1.87	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Woodbridge	N16 D1	232.46	1,197	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	2	0.75	10
Woodstock	N10 D2	138.72	737	1.30	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	2	0.75	10
Total, Niagara system		7,578.53	51,520															

*See footnote on page 106. ‡See heading to first page of table.

GEORGIAN BAY SYSTEM

Alliston	S32 D1	25.05	158	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Arthur	E13 D2	2.40	10	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Bala	GB13 D1	46.72	295	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Barrie	S4 D1	77.08	611	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Baysville	M10 D1	32.55	182	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Beaumaris	M7 D1	47.25	359	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Beaverton	W2 D1	32.41	398	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
			†	1.22	1.89	1.39	1.89	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Beeton	S33 D1	1.80	5	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Bradford	S37 D1	27.17	91	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Bruce	E19 D1	62.65	311	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Buckskin	S24 D1	1.75	22	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Cannington	W3 D1	10.09	53	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Chatsworth	E3 D1	....	22	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Cookstown	S35 D1	0.90	3	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Creemore	S10 D2	33.22	140	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Dundalk	E5 D1	4.05	21	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Elmvale	S7 D1	26.25	160	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5.5	2	0.75	10
Flesherton	E1 D1	2.60	27	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Gravenhurst	M4 D1	5.64	29	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Hawkestone	S9 D1	38.35	243	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Holstein	E7 D1	0.50	8	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Huntsville	M2 D1	41.30	174	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Innisfil	S31 D1	41.24	728	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Lucknow	E24 D1	0.11	2	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Mariposa	W9 D1	50.50	336	1.20	1.90	1.40	1.90	**2.00**	2.16	3.00	3.70	4.26	5.56	6.70	6	2	0.75	10
Markdale	E1 D2	20.85	87	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Meaford	E14 D1	6.39	34	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Medonte	S18 D1	23.30	112	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Midland	S1 D1	55.85	296	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Minden	G37 D1	2.61	39	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10

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†Cedarhurst and Maple Beach Extensions.

RURAL POWER DISTRICTS—MILES OF LINE, NUMBER OF CONSUMERS AND RATES

Rural power district	Rural rates																	
	Class			1B	1C	2A	2B	3*	4	5	6A	6B	7A	7B	Gross consumption charges			Prompt payment discount
	Property number	Miles of line	No. of consumers	Gross monthly service charge to consumers other than farmers											First energy rate‡	Second energy rate‡	Rate for all additional	
				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	cents	cents	cents	%
Neustadt	E8 D1	0.76	6	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Nottawasaga	S5 D1	8.22	100	1.25	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Orangeville	E12 D1	23.73	86	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Owen Sound	E2 D1	20.54	112	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Port Perry	W12 D1	53.06	426	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Ripley	E24 D2	4.92	15	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Sauble	E46 D1	13.75	91	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Shelburne	E10 D1	18.44	54	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Sparrow Lake	W1 D1	39.49	360	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Tara	E15 D1	36.75	160	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Thornton	S36 D1	8.00	31	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Tottenham	S34 D1	0.30	1	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Utterson	M8 D1	30.90	170	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Uxbridge	W11 D1	65.84	223	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Wasaga Beach	S10 D1	18.76	777	1.00	1.75	......	......	......	......	......	......	......	......	......	4.5	1.5	......	10
Wroxeter	E22 D1	36.81	298	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Total, Georgian Bay system		1,100.85	7,866															

*See footnote on page 106. ‡See heading to first page of table.

EASTERN ONTARIO SYSTEM

Rural power district	Property number	Miles of line	No. of consumers	1B	1C	2A	2B	3*	4	5	6A	6B	7A	7B	First energy rate‡	Second energy rate‡	Rate for all additional	Prompt payment discount
Alexandria	L15 D1	20.68	116	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Arnprior	QM10 D1	5.72	68	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Belleville	C38 D1	94.23	737	1.13	1.80	1.32	1.80	**1.89**	2.03	2.83	3.50	4.01	5.24	6.33	3.5	1.5	0.75	10
Bowmanville	C23 D1	35.17	164	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Brighton	C6 D1	12.63	71	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Brockville	L3 D1	99.36	718	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Campbellford	C11 D1	23.15	88	1.20	2.11	1.50	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Carleton Place	H5 D1	0.50	1	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Chesterville	L5 D1	61.74	435	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Cobourg	C13 D1	118.48	564	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Colborne	C7 D1	44.11	240	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Fenelon Falls	C30 D1	62.06	392	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10

Iroquois	L9 D1	91.61	174	1.11 0.83	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	Special			
Kemptville	H9 D1	5.43	51	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Kingston	C41 D1	160.09	974	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Lakefield	C18 D1	29.49	126	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Marmora	C47 D1	3.25	17	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Martintown	L13 D1	25.82	166	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Maxville	L11 D2	69.27	438	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Millbrook	C25 D1	22.26	140	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Napanee	C43 D1	131.26	640	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Nepean	T1 D1	198.97	1,282	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	3	1.5	0.75	10
Newcastle	C22 D1	30.45	137	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Norwood	C31 D1	18.88	102	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Omemee	C26 D1	5.22	10	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Oshawa	C24 D1	142.84	1,798	1.00	1.69	1.24	1.69	**1.78**	1.91	2.67	3.29	3.78	4.93	5.96	3	1.75	0.75	10
Perth	H2 D1	17.43	87	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Peterborough	C20 D1	71.24	1,214	0.63	1.16	0.79	1.21	**1.59**	1.66	2.01	2.57	2.91	3.81	4.62	4	2	0.75	10
Prescott	L2 D1	37.16	215	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Renfrew	QM16 D1	30.27	203	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Smiths Falls	H3 D1	73.18	444	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Stirling	C35 D1	27.81	117	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Trenton	C3 D1	62.46	279	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	5	2	0.75	10
Warkworth	C49 D1	0.77	10	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Wellington	C45 D1	119.34	513	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Williamsburg	L7 D1	33.60	181	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Total, Eastern Ontario system,		1,985.93	13,212															

THUNDER BAY SYSTEM

Fort William	P10 D1	55.60	207	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Port Arthur	P2 D1	30.33	149	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	4	2	0.75	10
Total, Thunder Bay system		85.93	356.															

MANITOULIN RURAL POWER DISTRICT

Manitoulin	FM1 D1	37.25	189	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10

NORTHERN ONTARIO PROPERTIES NIPISSING DISTRICT

North Bay	Z4 D1	15.27	452	0.87	1.38	1.01	1.38	**1.44**	1.56	2.17	2.68	3.07	4.01	4.84	6	2	0.75	10
Powassan	Z8 D1	4.10	19	1.33	2.11	1.56	2.11	**2.22**	2.39	3.33	4.11	4.72	6.17	7.44	6	2	0.75	10
Total, Nipissing district		19.37	471															

Total, all systems: Miles of line, 10,807.86.[¶] **Number of consumers, 73,614.** *See footnote on page 106. ‡See heading to first page of table.

[¶] This total includes 170.69 miles of primary line under construction on October 31, 1936, to serve 604 new consumers

CLASSIFICATION OF SERVICES FOR RURAL POWER DISTRICTS

When contracts between the consumer and the township have been executed, users of power in townships are supplied with electric service under general classes, according to the requirements and conditions of the individual consumer, as follows:

Class	Service	Class demand kilowatts	Phase	Volts	Fuse rating amperes (maximum)
1B	Hamlet Lighting	1.32	1	110	20
1C	" "	2	1	220/110	35
2A	House Lighting	1.32	1	110	20
2B	Small Farm Service	2	1	220/110	35
3	**Light Farm Service**	**3**	**1**	**220/110**	**35**
4	Medium Farm Service	5	1	220/110	50
5	" " "	5	3	220/110	35
6A	Heavy Farm Service	9	1	220/110	100
6B	" " "	9	1 and 3	220/110	60
7A	Special Farm Service	15	1	220/110	According to load
7B	" " "	15	1 and 3	220/110	According to load

Class 1: Hamlet Service—Includes service to consumers (other than farm and power users) in hamlets, where four or more consumers are served from one transformer. Service is given under two sub-classes as follows:

> **Class 1-B:** Service to residences or stores, including use of portable appliances, and permanently installed appliances not exceeding 1,320 watts.
>
> **Class 1C:** Service to residences or stores with electric range or ordinary permanently installed appliances greater than 1,320 watts. Where a combination of residence and store can be supplied from one service, the combination is billed as a single Class 1-C consumer. Special or unusual loads will be treated specially.

Class 2-A: House Lighting—Includes service to all consumers other than farm and power users that cannot be grouped as in Class 1.

Class 2B: Farm Service, Small—Includes service for lighting of farm buildings, power for miscellaneous small equipment and power for single-phase motors not exceeding 2 horsepower and electric range if motors and range are not used simultaneously, on a farm of fifty acres or less.

Class 3: Farm Service, Light—Includes service for lighting of farm buildings, power for miscellaneous small equipment and power for single-phase motors not exceeding 3 horsepower and electric range if motors and range are not used simultaneously.

Class 4: Farm Service, Medium Single-Phase—Includes service for lighting of farm buildings, power for miscellaneous small equipment and power for single-phase motors up to 5 horsepower demand and electric range if motors and range are not used simultaneously.

Class 5: Farm Service, Medium 3-Phase—Includes service for lighting of farm buildings, power for miscellaneous small equipment and power for 3-phase motors up to 5-horsepower demand and electric range if motors and range are not used simultaneously.

Class 6: Farm Service, Heavy—Includes service for lighting of farm buildings, power for miscellaneous small equipment and power for motors up to 5-horsepower demand and an electric range, or 10-horsepower demand without an electric range. Single- or three-phase service will be given at the discretion of The Hydro-Electric Power Commission of Ontario.

Class 7: Farm Service, Special—Includes service for lighting of farm buildings, power for miscellaneous small equipment, power for 3-phase motors from 10- to 20-horsepower demand and electric range. Single-or three-phase service will be given at the discretion of The Hydro-Electric Power Commission of Ontario.

Note: Classes 2B to 7B are designed primarily to cover the service requirements of farmers. Consumers other than farmers who require a more comprehensive service with greater demand than is provided for in classes 1B, 1C and 2A may obtain this service upon payment of the specified service charge listed in the table of rates.

Note: Class 2B is the service usually supplied to farms of fifty acres or less and Class 3 is the service usually supplied to larger farms. More than 90 per cent of new contracts for farm service are in one or other of these classes.

SECTION IV

HYDRAULIC ENGINEERING AND CONSTRUCTION

IN the field of new power development, activities of the Hydraulic department were confined to northern Ontario. Load growth in mining districts demanded plant extensions, particularly in the district of Patricia, where a second plant was built at Rat Rapids on the Albany river, and an extension to the Ear Falls plant on the English river commenced. These two plants, while not of great capacity, have had an important bearing on the development of mines to the north of the rivers named.

The completion of the Abitibi Canyon development made available additional supplies of power for mining, metallurgical and other industries in a very large area in the districts of Sudbury, Timiskaming and Cochrane.

Improvements were made in other northern Ontario developments, as for example at the McVittie generating station on the Wanapitei river, where a new dam and headworks were built, mechanical equipment overhauled, and the tailrace improved.

In the Niagara district changes were made at the intake of the Ontario Power plant, to forestall the reduction in plant output that in the past has been caused by large quantities of ice entering the intake, a condition accentuated in recent years by the extremely low water levels in the Niagara river.

Eight hydraulic construction jobs were handled by the Construction department, involving an expenditure of $304,640 for labour. A description of each of these is included in this Report.

Extensive surveys of power and storage sites were conducted during the year: on the Frederick House river for the benefit of the Abitibi development; on the Ogoki river for the benefit of the Nipigon and Niagara river developments, and on the Madawaska river for the benefit of power supply in the Eastern Ontario system. The Commission controls several sites on the Madawaska river, at which about 100,000 horsepower may be economically developed.

Other activities of this department included the collection of hydrometric records, control of storage works, rehabilitation or re-design and reconstruction of several existing works for the development of power or storage of water, and numerous other matters in connection with Commission lands and properties.

NIAGARA SYSTEM

Ontario Power Plant

During recent years, water levels in lake Erie and the Niagara river have reached unprecedentedly low stages. As a consequence, ice has caused more operating difficulty than usual. To cope with this situation, improvements have been made at the intake of the Ontario Power plant. Some time ago flashboards were erected along the greater part of the overflow from the outer forebay to reduce the inflow through the diverter, and therewith the amount of ice drawn into the forebay. To effect a further improvement, a bridge, providing support for, and the means to handle, needle beams, was erected over the remaining part of the overflow. With the needle beams in place, no water entering the outer forebay now passes over the overflow. The velocities under the diverter wall are consequently reduced, and less ice is drawn into the forebay. By the removal of the needle beams the smaller ice accumulations that do occur can be flushed out.

In addition to this, the small ice chute at the end of the screen house has been removed, and one much wider and deeper built in its place to enable accumulations of ice in the screen house to be flushed into the river below the overflow.

EASTERN ONTARIO SYSTEM

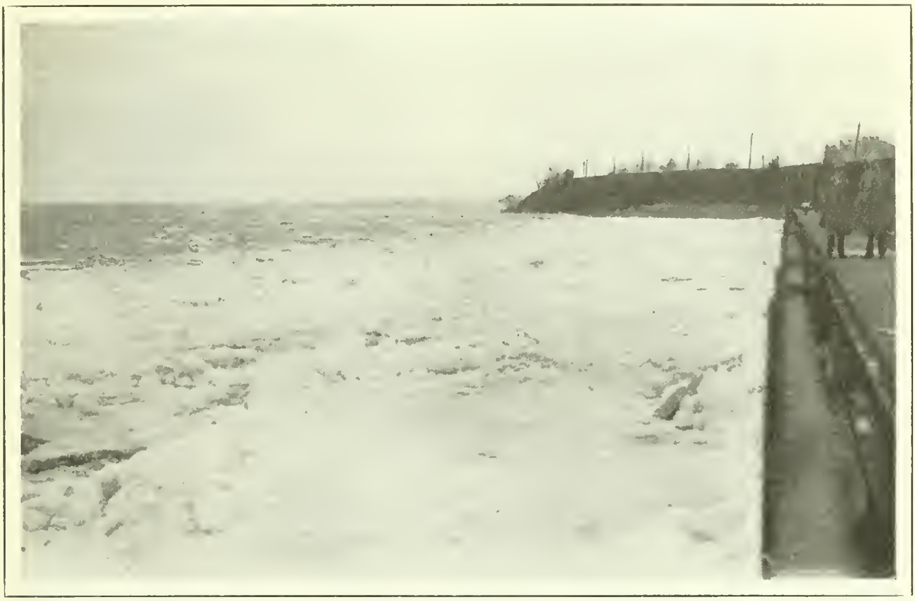
A survey of certain undeveloped sites on the Madawaska river was made, preparatory to planning development of the sites. The surveys extended over those parts of the river that would be affected by developments at Claybank, Stewartville, Burnstown and High falls. These and other sites controlled by the Commission have a capacity estimated at 100,000 horsepower. The survey and office work on the reduction of the survey records are continuing.

Repairs were made to the Bark Lake storage dam, a rock-filled timber crib and earth-fill structure, which provides storage for use at power sites on the Madawaska river.

At the Galetta generating station a portion of the forebay wall which had failed was reconstructed. In addition to these emergency repairs, the turbines and governors were overhauled, and repairs and improvements made to the dam and power house. The work was completed and the plant made available for service in September.

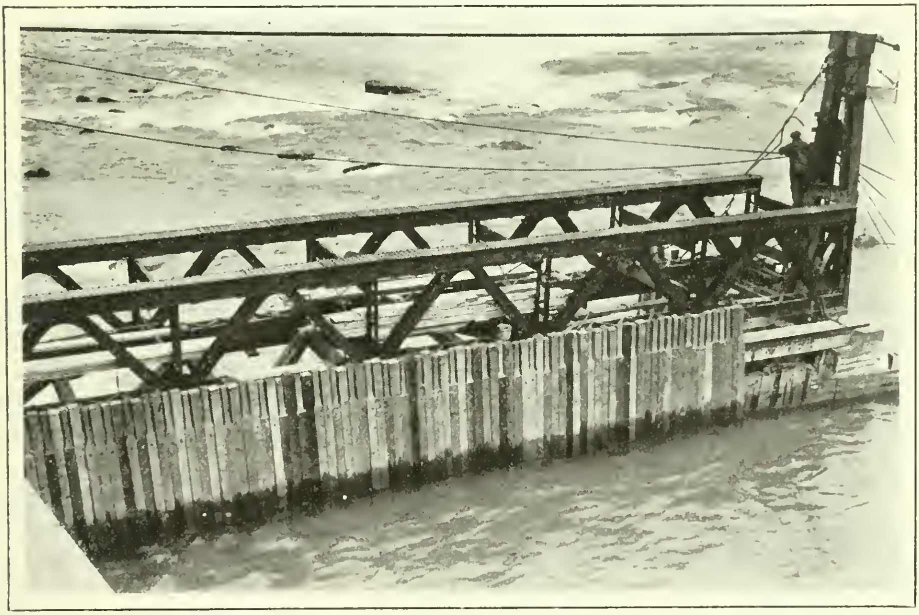
At the Calabogie development repairs were made to the main channel, dam and headworks and the turbines were overhauled and realigned.

Inspections were made of three developments near Peterborough on the Trent canal system, which it was suggested might be purchased by the Commission. The value of these as generating units in the Commission's system was investigated, and estimates prepared of the cost of placing them in good operating condition.



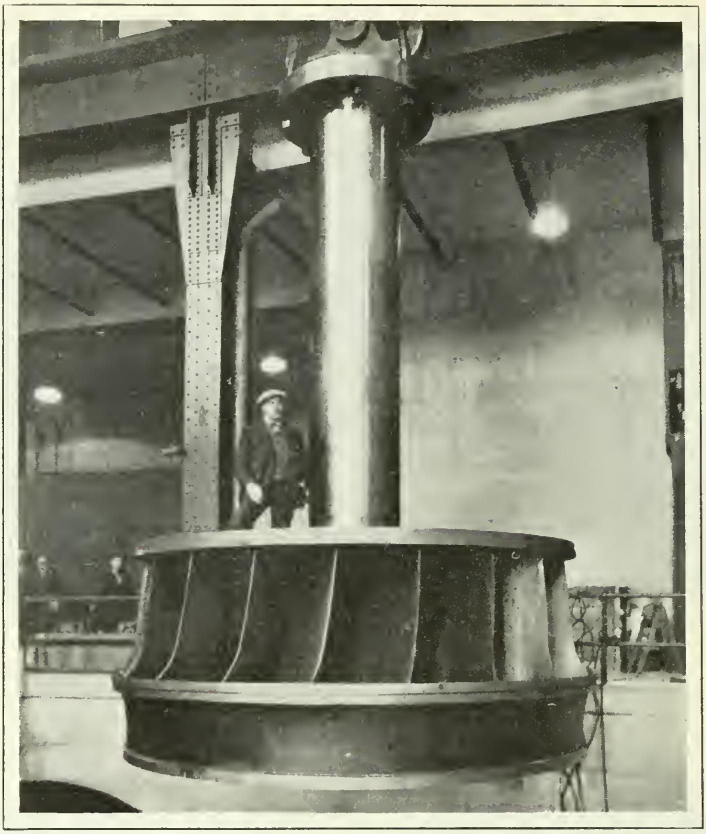
ONTARIO POWER GENERATING STATION

Ice accumulation in front of diverter, April 1935



ONTARIO POWER GENERATING STATION

Needle beams in place closing spillway in outer forebay



NORTHERN ONTARIO PROPERTIES

Abitibi Canyon Generating Station. Turbine runner and shaft suspended on crane

NORTHERN ONTARIO PROPERTIES

Abitibi District

At the end of 1935, work was in progress on the installation of units Nos. 3, 4 and 5 at the Abitibi Canyon development. Units Nos. 3 and 4 were ready for service early in November, 1935, and work on unit No. 5 was well advanced. No. 3 unit was turned over on November 30 and carried commercial load on December 18; unit No. 4 carried commercial load on January 9, and unit No. 5 on May 7, 1936.

With the completion of these three units the whole of the generating installation originally contemplated for this development is in service. In point of rated capacity this generating station is second in Ontario only to the Queenston generating station; the Abitibi Canyon plant having a turbine rating of 330,000 horsepower and Queenston plant 560,000 horsepower. The individual turbine units at Abitibi Canyon, however, are somewhat larger than those at Queenston and, as noted below, have a maximum efficiency equal to that realized at Queenston,

ABITIBI RIVER AT OTTER FALLS

Looking north and down stream from high point on west bank 18 miles below Abitibi Canyon

Hydraulic tests were conducted upon units Nos. 1 to 4 in January and February, for the purpose of determining whether the turbines met the guarantees of the manufacturer, to measure various hydraulic losses in the plant, and to rate the plant as to water used in terms of power generated. Very satisfactory results as to efficiency and capacity were obtained, the maximum turbine efficiency reaching the high figure of 93.7 per cent, and high efficiency was maintained over a wide range of the capacity of the units.

Erosion of concrete structures in the high-water channel necessitated repairs and improvements. This work was done after work on other hydraulic structures and the power house was completed.

All work on this development was completed and the construction force disbanded by the end of the fiscal year.

The Abitibi Canyon development benefits by storage of water on lake Abitibi. With a view to effecting a further increase in the minimum flow, storage surveys were made on the Frederick House river. The proposals involve the construction of a dam and the use of Frederick House and Night Hawk lakes as storage reservoirs.

NORTHERN ONTARIO PROPERTIES

Tail-race at McVittie generating station. Improvements here, made in 1936, effected a gain of approximately two feet of head

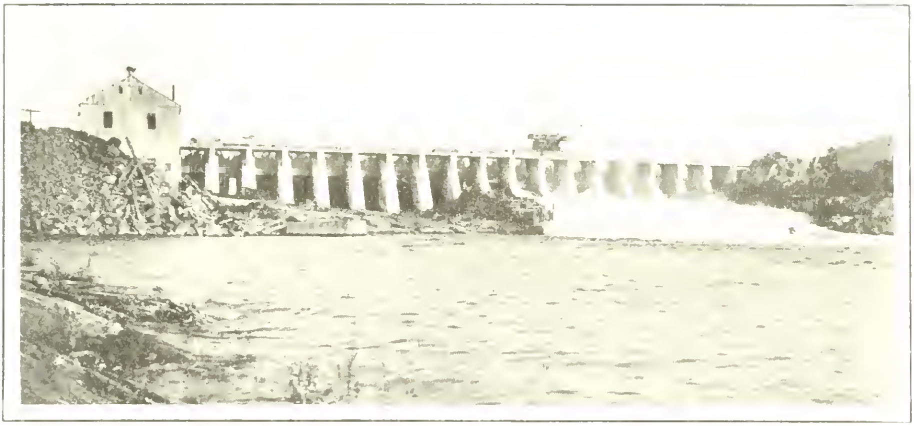
Sudbury District

At the McVittie development on the Wanapitei river, the main dam and headworks were replaced and repairs made to forebay walls. The new dam, a pier and stop-log structure of concrete, is immediately downstream from the old dam, which served as a cofferdam during construction, and is joined to the new portion of the headworks. Repairs were made to those parts of the east forebay concrete wall which were not replaced. Improvements made in the tailrace resulted in an appreciable gain in head and plant capacity. All of this work was completed at the end of the fiscal year. The old dam will later be removed.

St. Joseph District

Rapid development of mines and mining prospects in the district of Patricia has placed demands on the generating stations at Rat Rapids on the Albany river and at Ear Falls on the English river approaching or exceeding their capacity, and new power contracts have required the extension of both plants.

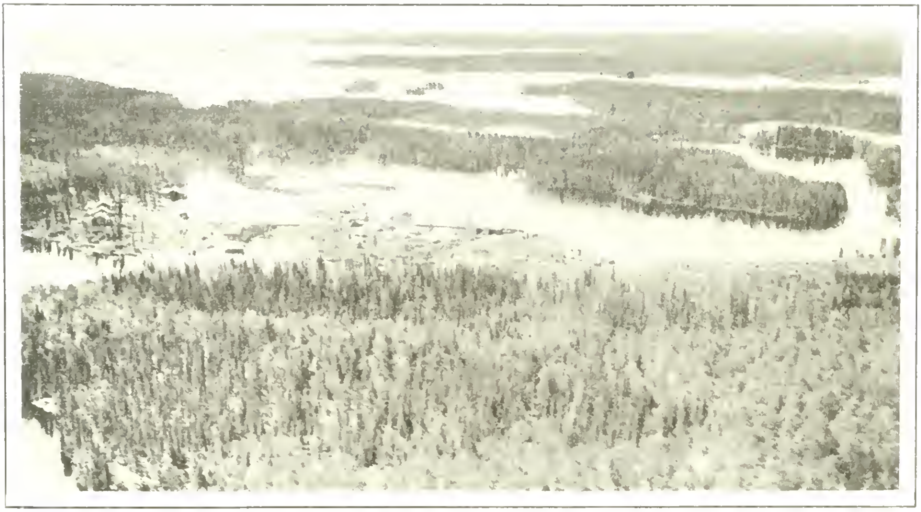
The Rat Rapids development on the Albany river at the outlet of lake St. Joseph was built to supply the requirements of mines in and around Pickle lake, about twenty-five miles north of the generating station. It was designed originally to generate 1,200 horsepower at a head of 14½ feet, but due to insistent demand for more power the head was increased to about 17 to 18 feet, and the resulting capacity to 1,600 horsepower. Increased activity in the district has necessitated the construction of a second development at the site.



NORTHERN ONTARIO PROPERTIES

Ear Falls dam and generating station. The extension to this station is being built adjoining, and to the right of the present station

The new development contains a single vertical propeller type turbine in concrete casing, rated at 1,750 horsepower under a head of 16 feet, directly connected to a generator rated at 1,500 kv-a. at 85 per cent power factor, 2,300 volts. Construction was facilitated in this new development as compared with the old by the improved transportation facilities now available. Transportation of material to such a site as this, however, is still difficult and expensive. The plant first carried commercial load on September 29, 1936.



NORTHERN ONTARIO PROPERTIES

General view of Rat Rapids development. The new development completed in 1936, is in the channel to the right of the construction camp

Patricia District

Similar conditions as to load demands were experienced in the district served by the Ear Falls generating station on the English river. An extension similar in design and capacity to the original development is under construction. It will contain a single vertical propeller type unit rated at 5,000 horsepower, 180 r.p.m. under a head of 36 feet, directly connected to a generator rated at 4,500 kv-a, at 85 per cent power factor, 6,600 volts.

HYDRAULIC INVESTIGATIONS

The proposals of the Canadian Niagara Power Company to build a gathering dam in the Niagara river in front of the intake to its generating station were studied. The purpose of the structure is to restore the head-water levels lowered, in part, by recession of the crest of the falls, and to overcome the reduction in generating capacity due to ice accumulation in the forebay.

A study of the Trent canal system covering existing and possible future power developments was made.

The possible diversion of the upper waters of the Ogoki river into lake Nipigon and thence to the Great Lakes system was further studied.

The diversion would provide additional stream flow for present and future power developments on the Nipigon, St. Marys, Niagara and St. Lawrence rivers. Preliminary investigations, made some years ago, indicated that the proposal merited further study. Topographic surveys were therefore made in 1926, and preliminary studies and estimates based on them. During the past summer two survey parties were placed in the field to continue the topographic studies from the point at which they ceased in the earlier survey and to collect data in connection with subsurface material at points where dams and other structures might be located, and along the proposed outlet channels leading to lake Nipigon.

The power possibilities of the Ottawa river have been further studied, and various problems, including water supply, storage, existing and future developments, interprovincial co-operation, markets for power, and other matters have been considered.

SECTION V

ELECTRICAL ENGINEERING AND CONSTRUCTION

(STATION SECTION)

CONSTRUCTION work continued actively in connection with the Northern Ontario properties. Abitibi Canyon development was completed, an additional 1,500-kv-a generator was installed at Rat Rapids development and the second generator purchased for Ear Falls development.

A new 4,500-kv-a transformer station is nearly completed at Pamour. Many metering installations were installed for measuring loads of new mining customers.

A new 6,000-kv-a sub-station was constructed at Sudbury, and improvements in housing for operators at the Sudbury District developments are nearly completed. The reconstruction of Stinson development following the fire damage on September 10, and emergency installation of equipment for a temporary power supply from Espanola were carried out on a rush schedule. The Stinson plant was restored to full capacity by October 30.

On the Niagara system the transformer capacity of seven distributing stations was increased and three new stations were constructed. Transformer changes were made at Welland transformer stations. Re-arrangements of circuits were carried out at the Niagara transformer station and at the Ontario Power and Toronto Power plants. Improvements in relaying were made at several stations.

Transformer capacities, on Eastern Ontario system were increased at Oshawa, Bowmanville, Kingston, Smiths Falls, Williamsburg, Renfrew and Belleville sub-stations and at Galetta development.

Load growth in the mining area east of Nipigon river required increased capacity of transformers at Cameron Falls transformer station on the Thunder Bay system and the raising of the transmission voltage to 44,000 volts.

On Georgian Bay system, increased transformer capacity was provided at Penetang for the rural station and at Big Chute development a 100-kv-a transformer was installed.

Engineering studies on all systems were continued throughout the year.

Nearly five hundred kilowatt-hour meters were installed at metering stations on all systems and districts.

The Construction department carried out, in all, 191 jobs for the Station section, including new transformer stations at Pamour and Sudbury, a new switching station at Kirkland Lake, reconstruction of Stinson generating station, and additional transformer banks and equipment at many points throughout the various systems.

NIAGARA SYSTEM

Generating and Step-up Transformer Stations

Stations on Niagara River

Engineering studies were conducted throughout the year to make more effective use of the existing equipment and improve operating conditions in the plants at Niagara, and to meet load requirements.

The 12,000-volt cables to Niagara transformer station and the transformer banks in the station were re-arranged. The relaying systems on both the 110,000-volt and 46,000-volt transformer banks were improved. Modern lightning-arresters were installed on the 60,000-volt lines at Ontario Power transformer station, and the 30,000-volt transformer banks were reconnected for 60,000-volt service.

Transformer and Distributing Stations

Niagara District—The power supply to Welland was changed from 60,000 volts to 46,000 volts and the bank of three 5,000-kv-a transformers was replaced by a bank of three 5,500-kv-a transformers and a spare unit obtained from Toronto-Davenport transformer station. The new bank was arranged for outdoor service and connected to supply power to Electro-Metallurgical Company at 26,400 volts. Certain equipment in the company's plant was adjusted to accommodate this new voltage. The three 5,000-kv-a transformers released from Welland were moved to Thorold. The bank of three 2,400-kv-a transformers at this station was re-connected for 46,000 volts and supplies power for the local load at 12,000 volts. A bank of similar capacity will be released from Thorold and installed in parallel.

The power supply to Thorold is being changed from 60,000 volts to 110,000 volts and the bank of three 5,000-kv-a transformers is being reconnected for this purpose and a duplicate bank transferred from Welland is being installed. One of the banks of three 2,400-kv-a transformers now at this station will be installed at Welland and the other at Niagara transformer station.

St. Catharines Burgoyne switching station was installed on the site of St. Catharines municipal station No. 3. It includes equipment for two 12,000-volt feeders. The station is unattended but the oil circuit-breakers are equipped with relays which signal any automatic operation to St. Catharines Vine street station and St. Catharines municipal office. Telephone equipment was installed.

At Lincoln distributing station the 12,000-volt Grimsby feeder was removed and changes were made in the metering equipment.

At Union Carbide metering station the 46,000-volt metering equipment was removed and the necessary 220-volt metering equipment installed.

At Garden City Pulp and Paper Company's plant at Merritton the necessary 12,000-volt metering equipment was installed.

At Jordan distributing station a 300-kv-a, 3-phase transformer, obtained from system reserve, was installed temporarily in parallel with the existing bank of similar rating.

At St. Davids distributing station a 150-kv-a, 3-phase transformer, obtained from system reserve, was installed temporarily in parallel with the existing 300-kv-a bank.

Hamilton and Dundas District—At Dundas transformer station a septic tank and disposal bed were installed.

At Hamilton Beach transformer station metering equipment was installed on the 13,200-volt feeder supplying power to Dominion Foundries and Steel Company Limited. The air-insulated current-transformers were removed from No. 1 and No. 2 transformer banks and two neutral busses were installed and connected direct to the neutral bushings of the transformers. High-speed relaying equipment was installed on the 110,000-volt circuit to Hamilton-Stirton transformer station.

Fruitland distributing station was installed about midway between Fruitland and Stoney Creek to supply power to the village of Stoney Creek and a section of Saltfleet rural power district. Three new 250-kv-a transformers were purchased for the installation and the station placed in service in October.

At Port Nelson distributing station the bank of three 250-kv-a transformers was replaced by a bank of three new transformers of similar rating and the removed transformers were rebuilt with modern windings and installed at Tavistock distributing station.

At Stoney Creek metering station and Burlington, Bronte and Oakville distributing stations additional metering equipment was installed. At the latter two stations and at Waterdown distributing station larger capacity current transformers were installed.

At Bartonville switching station the 60-cycle power for station service was replaced by 25-cycle power from Saltfleet rural power district.

Toronto and York District—At Toronto-Leaside transformer station another 250-volt storage-battery was installed and a ventilating fan was placed in the roof of the control-room. Improvements were made in the relaying equipment which controls the automatic starting of the 25,000-kv-a synchronous-condensers. A number of tests were made with oscillographs to study the starting conditions of the synchronous-condensers.

At Cooksville transformer station current-balance relays were installed on the Brampton feeders.

At Clarkson an outdoor distributing station was erected to supply power to the surrounding district. Three 250-kv-a single-phase transformers were purchased and the station was placed in service in June.

At Rifle Ranges, Toronto Township, Port Credit, Albion Park and Willowdale distributing stations changes were made in the metering equipment.

At Willowdale auto-transformer station automatic-re-closing equipment was installed on the two 13,200-volt oil circuit-breakers controlling the auto-transformers.

At Brampton municipal station changes are being made at the request of Brampton Hydro-Electric Commission to improve operating conditions. Two new, high-voltage and four low-voltage oil circuit-breakers and all necessary auxiliary switching equipment were purchased and installed. The voltage was changed from 2,300 to 4,000-volts and a new relaying system was installed. The work should be completed in November.

London District—In Thorndale metering station changes were made in the equipment.

At Lucan distributing station the Granton feeder was relocated on the opposite side of the building and the current-transformers were replaced with larger capacity units.

At Exeter distributing station changes were made in the metering equipment.

Guelph District—At Guelph transformer station additional relays were installed for differential protection on the 13,200-volt bus.

At Georgetown distributing station the metering equipment was rearranged. The supply of 13,200-volt power to Georgetown (Provincial Paper) distributing station through this station was discontinued and all connections were removed. Switching equipment was installed outdoors whereby either of these stations can now be supplied direct from Guelph transformer station or Cooksville transformer station. The Provincial Paper Company's load is now metered at the company's plant.

Kitchener District—At Kitchener transformer station disconnecting switches were installed in the connections from the two transformer banks to the 13,200-volt emergency bus.

At St. Jacobs distributing station the bank of three 100-kv-a transformers was removed and three new 250-kv-a transformers installed in order to provide for the increasing load on the station. The released transformers were transferred to system reserve.

At Mannheim a distributing station was installed to supply power to the surrounding district. Three 75-kv-a transformers released from Tillsonburg rural station were used for this installation and the station was placed in service in August.

Stratford District—At Tavistock distributing station the capacity was increased. The three 250-kv-a transformers removed from Port Nelson distributing station and rebuilt were installed and placed in service in October. The three 150-kv-a transformers which were replaced will be transferred to system reserve.

At Clifford and Brussels metering stations new metering equipment was installed.

At Milverton distributing station, ventilators were installed in the roof and walls.

Woodstock District—At Tillsonburg rural station the transformer capacity was increased. The three original 75-kv-a transformers were replaced by a bank of three 150-kv-a units which were recently released from Port Stanley distributing station. The removed transformers were used at Mannheim distributing station.

St. Thomas District—At St. Thomas transformer station potential-indicating equipment was installed on the 110,000-volt bus and lines.

At Port Stanley distributing station the indoor bank of three 150-kv-a transformers was replaced by an outdoor bank of three new 250-kv-a units to provide capacity for the increasing load. The replaced transformers were installed at Tillsonburg.

At Rodney metering station the potential-transformers were replaced.

Brant District—At Port Rowan distributing station two new single-phase, 37½-kv-a transformers were installed with the existing unit from the Walsingham rural power single-phase feeder, to complete a three-phase, 8,000/4,000-volt bank and supply 4,000-volt power to the village of Port Rowan. This installation was made necessary as the power circuit from St. Williams distributing station which was previously operating at 4,000 volts was changed to 8,000 volts. Walsingham rural power district is now supplied with three-phase power at 8,000 volts direct from St. Williams.

Essex District—At Essex transformer station metering equipment was purchased and installed to totalize the power to the city of Windsor. Improvements were made in the facilities for draining and cleaning the cooling ponds.

At East Windsor distributing station a new 24-volt battery with trickle-charger was installed to supply power for tripping the oil circuit-breakers. A 26,400-volt disconnecting-switch was also installed.

At Leamington distributing station metering equipment was installed on the 4,000-volt feeder supplying power to H. J. Heinz Company.

St. Clair District—At St. Clair transformer station improvements were made in the 26,400-volt relaying equipment.

At Oil Springs distributing station the 75-kv-a, 3-phase transformer was replaced by a 150-kv-a, three-phase unit placed on a concrete pad with the existing transformers of similar capacity. New switching equipment was also installed.

At Petrolia distributing station the 26,400-volt indoor lightning-arrester was replaced by an outdoor arrester on each feeder.

GEORGIAN BAY SYSTEM

Engineering studies were made and estimates were prepared for the development of power on the Musquash river.

Severn District—At Big Chute generating station a new frequency-meter was installed. A tap was installed on the 2,200-volt feeder to the operators' houses, to provide a connection for supplying power to Big Chute distributing station.

Big Chute distributing station was erected near the generating station to supply 6,600-volt power to Honey Harbour and a section of Medonte rural power district. A 100-kv-a transformer was purchased and the station placed in service in August.

At Penetang rural station a new 75-kv-a, single-phase transformer was installed in parallel with the existing unit to provide the necessary capacity for the increasing load in the district.

At Alliston rural metering station changes were made in the equipment to enable Alliston rural power district feeder to be connected directly to the 2,200-volt bus in the Camp Borden municipal station instead of to the feeder supplying the camp.

At Buckskin and Innisfil distributing stations the 22,000-volt fuses were replaced by more suitable equipment.

Eugenia District—At Eugenia generating station the timber foundations for the 1,500-kv-a synchronous-condenser were replaced by concrete. Equipment was installed to filter and chlorinate the water from the penstocks and pump it to the operators' houses and generating station for domestic use.

At Owen Sound distributing station a motor-operated water-pump was installed for the transformer, cooling system.

Muskoka District—At South Falls generating station forced-air cooling was installed on the bank of three 400-kv-a transformers to increase the capacity.

At Falkenburg and Beaumaris distributing stations the original fuses were replaced with more suitable equipment.

Wasdells District—At Victoria Road metering station and Port Perry distributing station, changes were made in the metering equipment.

Bala District—At Port Carling distributing station the necessary changes were made to distribute power at 4,000 volts instead of 2,300 volts.

EASTERN ONTARIO SYSTEM

110,000-volt Transformer Stations

At Smiths Falls transformer station a 3,000-kv-a, three-phase transformer, recently purchased for system reserve, was installed in parallel with the existing 1,500-kv-a transformer to enable additional power to be transmitted from the Madawaska and Rideau districts to the remainder of the system.

Central Ontario District—At Sidney transformer station grounding switches were installed on two 6,600-volt circuits.

At Auburn switching station grounding switches were installed on three 44,000-volt circuits.

At Oshawa transformer station the capacity was increased by the installation of a new 3,000-kv-a transformer replacing a 1,500-kv-a unit. The replaced transformer was used at Kingston.

At Kingston transformer station a 750-kv-a transformer was replaced by the 1,500-kv-a unit released from Oshawa distributing station.

At Bowmanville transformer station the 750-kv-a transformer released from Kingston distributing station was installed in parallel with existing units and the capacity accordingly increased.

At Belleville distributing station No. 1, a 750-kv-a, three-phase transformer was removed and a new 1,500-kv-a unit installed. The replaced unit was stored in the station.

At Belleville Lehigh Canada Cement Company distributing station changes were made in the switching and metering equipment to enable a portion of the power to be supplied at 2,400 volts instead of 575 volts. A thermostatic alarm device was installed on the transformers.

At Port Hope switching station an alarm device was installed to signal any automatic operation of the oil circuit-breakers.

At Brighton, Colborne, Newcastle and Millbrook distributing stations the 44,000-volt lightning-arresters were replaced by modern and more suitable equipment.

At Trenton Air metering station the necessary equipment was installed to measure the power supplied to the Government air-port station over the 6,600-volt lines from Sidney transformer station.

At Cobourg rural station more suitable fuses were installed on the 44,000-volt circuit.

Engineering assistance was given Peterborough Public Utilities Commission in the preparation of plans for increasing the capacity of its municipal station.

St. Lawrence District—At Williamsburg distributing station the two 100-kv-a, single-phase transformers were replaced by a 300-kv-a, three-phase transformer and power is now supplied at 4,160 volts, three-phase instead of 2,400 volts, single-phase.

At Cardinal and Maxville distributing stations more suitable fuses were installed to replace the original fuses.

Madawaska District—At Galetta generating station a bank of three 400-kv-a transformers was installed for connection to the 33,000-volt system. The transformers were transferred from Cameron Falls transformer station.

At Renfrew rural station a bank of three 75-kv-a transformers was installed to step-up the voltage from 6,600 to 11,400 volts and supply power to Renfrew rural power district and the village of Cobden.

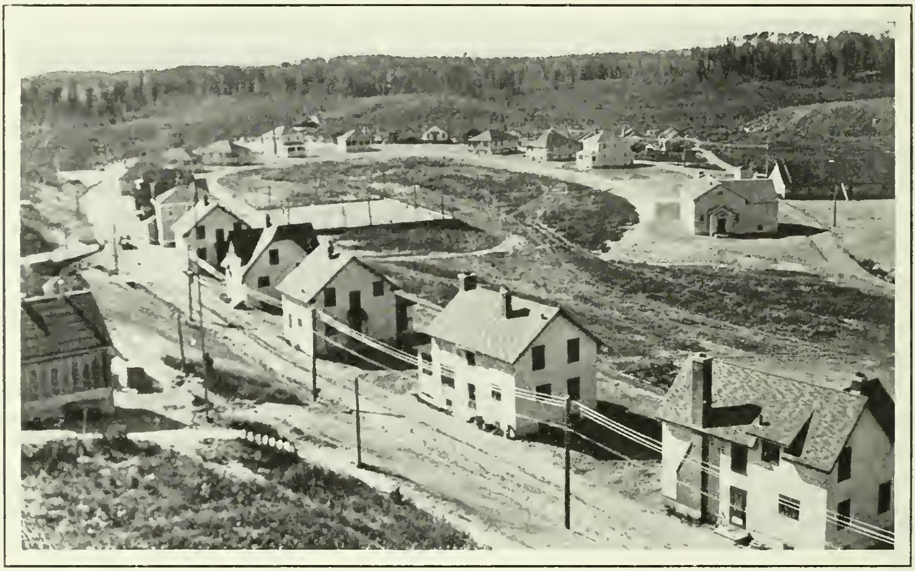
At Cobden distributing station the necessary changes were made to receive power at 11,400 volts instead of 6,600 volts as previously.

THUNDER BAY SYSTEM

At Cameron Falls transformer station the transformer capacity was increased to supply the increasing demand for power in the Little Long Lac mining area. A bank of three 1,500-kv-a transformers was installed, replacing the original bank of three 400-kv-a units. The new transformers were obtained from Abitibi Canyon development where they had been used during the construction period. They were originally rated 13,200/33,000-

volts but new windings were purchased and installed to give a voltage rating of 13,200/44,000 volts and the system voltage was correspondingly increased. The original transformers were transferred to the Madawaska district and installed at Galetta generating station.

At Sand River Gold Mines and Leitch Gold Mines metering stations the necessary 2,200-volt equipment was installed to meter the power supplied from Cameron Falls transformer station to the respective customers at 44,000 volts.



NORTHERN ONTARIO PROPERTIES

General view of operating settlement from top of water tower at Abitibi Canyon

NORTHERN ONTARIO PROPERTIES

Nipissing District

At Nipissing and Bingham Chute generating stations improvements were made to the operators' houses.

Sudbury District

At Stinson, at McVittie and at Coniston generating stations two cottages are being built for the use of the operators.

Stinson generating station was damaged by fire on September 10, 1936. It was necessary to rebuild a large portion of the walls and replace the roof. Much of the electrical equipment had to be returned to the factory for repairs and some new equipment had to be purchased before the station could be returned to service. The first generator was again in service on October 12, and the second generator with nearly all the other equipment was returned to service on October 30.

TRANSPORTATION IN NORTHERN ONTARIO

(1) Canoe train on Root River route, between Lac Seul and Lake St. Joseph
(2) Scow flotilla on Lac Seul-Red Lake route, breaking channel through 3-inch ice. Early November, 1936
(3) Breaking channel through 3-inch ice for scow flotilla. Lac Seul-Red Lake route. Early November, 1936

Sudbury distributing station was replaced by a new station on another site a few blocks away. The vacated building will be equipped for a storehouse and garage. The original 1,000-kv-a, single-phase transformers were converted to outdoor-type, and two new duplicate units purchased to complete two three-phase banks which were installed outdoors. The necessary steel structure was erected for the 22,000-volt switching equipment, also a brick building to house the 4,000-volt switching, metering and control equipment. The original station supplied two-phase power at 2,300-volts to a portion of the Sudbury distributing system and to Sudbury and Copper Cliff Suburban Railway but as the entire system was changed for three-phase, 4,000-volts distribution the new station was arranged to supply it. A specially connected auto-transformer was purchased and installed on the station site and connected to the suburban-railway feeders in order to continue the supply of 2,300-volt two-phase power to the company's station.

In order to relieve the conditions caused by the fire at Stinson generating station arrangements were made with Abitibi Power and Paper Company for a temporary supply of power at 33,000-volts from its Espanola generating station. Permission was obtained from International Nickel Company to use its line to Copper Cliff. A bank of three 1,500-kv-a transformers in service at Smiths Falls transformer station was removed and shipped to Sudbury distributing station and located on temporary foundations. The power was stepped down through this temporary bank from 33,000 to 4,000 volts and fed into the system on the low-voltage bus on September 19. As Stinson generating station is now rebuilt the temporary supply of power has been discontinued and the transformers are being returned to Smiths Falls.

Abitibi District

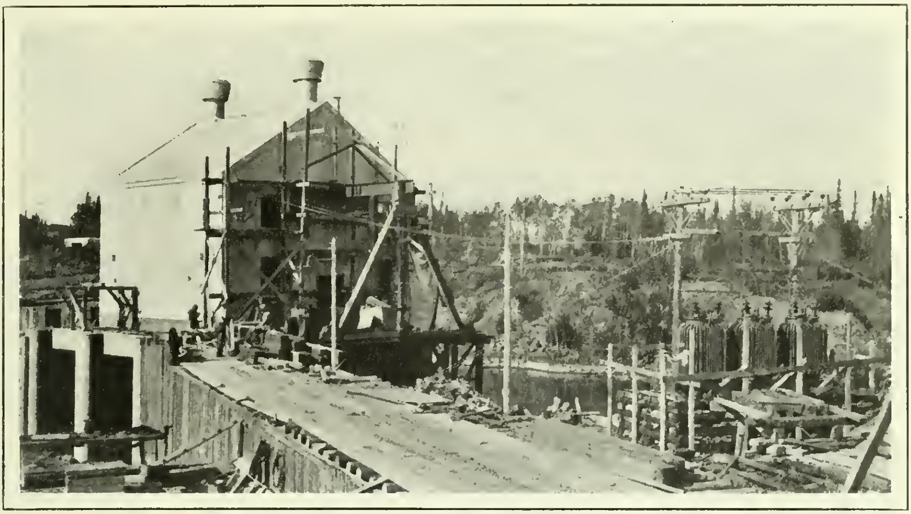
At Abitibi Canyon generating station the electrical installation was completed and placed in service except for No. 3 and No. 5 transformer banks, the installation of which has been temporarily deferred. A spare 750-kv-a station-service transformer was purchased and installed in July.

Timmins, Falconbridge and Larder Lake transformer stations which were under construction last year were completed and in service by December 1, 1935.

Pamour transformer station is being erected at Pamour Porcupine Mines Limited to provide additional capacity in the Porcupine area. A bank of three 1,500-kv-a transformers and all necessary switching and auxiliary equipment were purchased and the station should be in service in December. The transformers will be duplicates of the 1,500-kv-a transformers installed at Timmins, Falconbridge and Larder Lake transformer stations. A spare transformer of similar rating was also purchased which may be used at any of these stations.

At Smooth Rock Falls (steam) transformer station the necessary equipment was installed on the two 132,000-volt disconnecting-switches to open them automatically following other relay operations.

At Kirkland Lake transformer station, switching equipment was installed to provide for an additional 132,000-volt circuit. Additional cables and switching equipment are being installed for the 12,000-volt feeders.



NORTHERN ONTARIO PROPERTIES
Rat Rapids development—No. 2 power house under construction

Kirkland Lake switching station was installed about one mile north-west of Kirkland Lake transformer station to provide non-automatic switching on the 132,000-volt circuits. The station was placed in service on August 30. An operator's house is now being erected.

The work at Paymaster Consolidated Mines Limited which was reported last year was completed and the stations placed in service in November, 1935.

Ramore distributing station which was reported in 1935 was completed and placed in service on December 15, 1935.

At Paymaster Consolidated Mines Limited, Omega Gold Mines Limited and Falconbridge Nickel Mines Limited the necessary metering equipment was installed on the 26,400-volt side of the companies' stations to meter the power supplied to the respective customers.

At Hunta switching station permanent telephone equipment was installed.

At Moffatt Hall, Glenora Gold Mines and Kirkland Gold Rand metering stations the necessary equipment was installed to meter the power supplied from Kirkland Lake transformer station to the respective customers.

At International Nickel metering station at Copper Cliff additions were made to the metering equipment to measure the increased power supply to the customer.

At Preston East Dome Mines and Porcupine Lake Gold metering stations the necessary equipment was installed to meter the power supplied from Timmins transformer station to the respective customers.

At Hislop distributing station the necessary equipment was installed to supply single-phase power at 4,600 volts to Hislop townsite. The power is obtained through Hollinger Consolidated Gold Mines Limited station in Hislop township at 575 volts where it is metered. A 25-kv-a, 575/4,600-volt transformer was purchased for the installation.

Patricia District

At Ear Falls development a second bank of three 750-kv-a transformers was purchased and installed in parallel with the original bank to provide capacity for the total output of the existing generator. A new 4,500-kv-a generator was purchased and work is now under way for its installation. The new unit will be located in an extension to the existing building and should be ready for service in the summer of 1937.

At Red Lake Gold Shore Mines metering station, the metering equipment which was located temporarily at Howey Gold Mines sub-station was transferred to a new location in the customer's sub-station.

St. Joseph District

The capacity of Rat Rapids development was increased during the year when No. 2 unit was installed and placed in service on October 8, 1936. The new generator is a 1,500-kv-a, 60-cycle, 2,300-volt, 128.5 r.p.m. vertical-type machine with direct-connected main and pilot exciters. The transformers are 500-kv-a, single-phase units comprising a three-phase, 1,500-kv-a bank and step-up the generator voltage to system voltage of 22,000 volts. The generating station is situated about 400 feet north-west of the original station but duplicate indicating instruments for No. 2 unit are installed in No. 1 and No. 2 station and the machine can be controlled from either building.

TRANSPORTATION IN NORTHERN ONTARIO

Generator parts leaving Hudson railhead for Ear Falls—Tractor train on Lac Seul Transportation route, February, 1937

SECTION VI

TRANSMISSION, DISTRIBUTION AND RURAL SYSTEMS

TRANSMISSION LINES

EXTENSIVE additions and revisions to transmission facilities were made during 1936.

The Northern Ontario Properties, as in recent years, have demanded considerable attention. The second 132,000-volt line feeding the Kirkland Lake area was placed in service, also an extension to Larder Lake transformer station from Kirkland Lake. Seventy-two miles of 132,000-volt, wood-pole construction was completed in addition to lower voltage lines to six new mining stations.

Work is progressing in the Thunder Bay system on the Cameron Falls-Beardmore line.

Elsewhere, in the older districts, a large number of revisions and extensions were made and are in progress. Reinforcement to transmission line crossings over railways and telephone lines has continued in accordance with specifications of the Board of Railway Commissioners for Canada.

A detailed synopsis of the work completed during 1936 follows. A map showing the transmission lines and stations of the Commission will be found at the back of the Report and summary tabulations respecting transmission lines, in Appendix II.

NIAGARA SYSTEM

44,000-volt Lines

Between St. Catharines and Hamilton, the former Dominion Power and Transmission wood-pole line was transposed and re-phased.

26,400-volt Lines

The power circuit was removed from the wood-pole line between Cottam junction and Cottam distributing station, a distance of 0.80 mile. Air-break switches were removed from Maidstone and Ruthven distributing stations, and from Cottam junction. This line was used to supply the Windsor, Essex and Lake Shore electric railway which is now abandoned.

Between Sarnia Beach rural power district station and The Ontario Supply and Transport Company, 1.65 miles of wood-pole line was removed.

Air-break switches were installed on the line between Kingsville junction and Leamington distributing station to complete a connection to the Heinz Company.

Other Lines

Between Port Colborne transformer station and a new station owned by the International Nickel Company a double-circuit, 12,000-volt, steel-tower line was constructed. This tower line incorporates and replaces one of the former circuits feeding the International Nickel Company's old station so that both stations are equipped with a double-circuit supply over this route. The distance is 3,000 feet and the conductor is 1,033,500-circular-mil aluminum, which is the largest used on any of the Commission's transmission lines.

Between Thorold transformer station and Merritton switching station, the double-circuit, 173,000-circular-mil aluminum conductor was removed and replaced by a single-circuit of 345,000-circular-mil aluminum conductor, a distance of 3.95 miles.

Between a new junction established on the Merritton-St. Catharines line and the Garden City Pulp and Paper Company, 0.35 mile of 12,000-volt, wood-pole line was completed.

Rearrangement of some 12,000-volt lines in St. Catharines and vicinity was completed by the construction of 2.23 miles of single-circuit, 190,000-circular-mil copper line and the disposal of approximately 4 miles of circuit to the city.

Between the Ontario Power transformer station and Welland transformer station, 11.77 miles of double-circuit, 12,000-volt line and 13.29 miles of double-circuit, 30,000-volt line were removed. These lines were wood-pole construction and were 27 and 29 years old respectively.

A 46,000-volt, wood-pole line, 0.34 mile, was built between the Union Carbide Co. circuits and Welland transformer station.

Revisions to the circuits between Welland transformer station and the Electro Metals Company were made by the addition of a single-circuit, 26,400-volt wood-pole line, 0.28 mile long, having 500,000-circular-mil a.c.s-r* conductor, and a double-circuit, 12,000-volt, wood-pole line, 0.36 mile long, having 190,000-circular-mil copper cable.

At Dorchester distributing station the entrance structure was revised.

Between London transformer station and Strathroy municipal station, Elginfield junction and Ailsa Craig distributing station, work such as tree trimming, removal of grounding wires and revision to transpositions was completed following extensive rebuilding on these lines last year.

Between a junction established on the Kitchener-Baden line and a new distributing station at Mannheim, 1.9 miles of single-circuit, 13,200-volt, wood-pole line were completed.

Removal of 9.91 miles of ¼-inch steel ground cable from the 13,200-volt, wood-pole line between Woodstock transformer station and Ingersoll municipal station was completed.

In the York-Cooksville district, the recently purchased Toronto Suburban, 13,200-volt, railway feeder was rehabilitated and connections established so that it forms an alternative power supply to Georgetown which was formerly connected to the Guelph district only. A junction was established on the new line in the vicinity of Streetsville so that the transmission facilities to Streetsville, Milton and Brampton are reinforced.

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*Aluminum cable, steel-reinforced.

Between Cooksville transformer station and Long Branch junction pole, 5.95 miles of 13,200-volt circuit were revised by the removal of the ground wire and increasing the conductor spacing by pole-top pin construction.

Connections were made to former Toronto Power steel-tower lines at Hurontario street and 3.65 miles of circuit utilized to feed the new Clarkson distributing station at 13,200 volts.

GEORGIAN BAY SYSTEM

High-voltage Lines

In the 110,000-volt line between Erbs junction and Hanover frequency-changer station clearances to ground were increased at two structures by replacement with higher poles.

Eugenia District

Storm guys were installed at 20 poles in the 22,000-volt line between Hanover junction and Markdale junction.

In the city of Owen Sound a short stretch of 26,400-volt, wood-pole line was moved, at the municipality's request, in order to eliminate the danger due to loading cranes being worked near the old location. Provision was made on the new line for local circuits.

In the 22,000-volt line near Kilsyth distributing station a strain-equipped, dead-end pole was erected for sectionalizing purposes.

Minor revisions were undertaken at various points in the district as the need arose.

EASTERN ONTARIO SYSTEM

Central District

In order to make provision for a 6,600-volt circuit to the airport, revisions were completed at the Trent river and canal crossing of the 44,000-volt, wood-pole line between Sidney transformer station and Belleville switching station.

New, 44,000-volt air-break switches were erected to replace an old type at Newcombe, Welcome and Whitby junctions, in the wood-pole line between these points.

Guys were added to two telephone crossings over the Trent canal near Meyersburg.

St. Lawrence District

Between Dominionville junction and Maxville distributing station, in order to eliminate the danger of numerous corners in soft ground, 0.54 mile of 44,000-volt, wood-pole line was re-routed from roads to a more direct route on private property.

Between Winchester junction and Cardinal distributing station, due to the erosion of the canal bank, 13 poles were moved to private property.

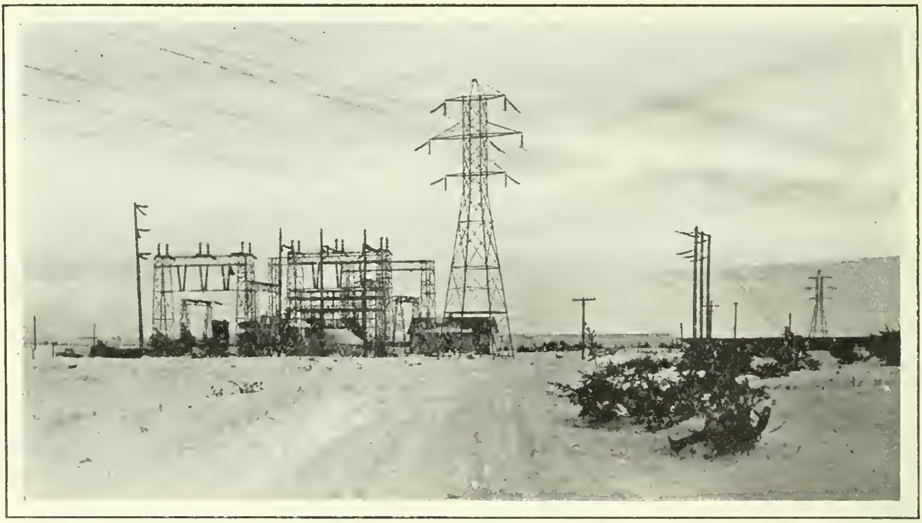
At Williamsburg distributing station, the single pole terminal was replaced by a two-pole structure in conformity with a new station structure.

At the Lower Lakes terminal station near Prescott the 44,000-volt line was extended one span to a switch structure located on a new station erected by the Department of Railways and Canals. The entrance span to the old station was removed.

THUNDER BAY SYSTEM

In the 110,000-volt line between Cameron Falls generating station and Alexander junction a two-pole crossing structure at Fraser Creek was replaced by a steel tower in a new location. This was done to eliminate the hazard of moving ice.

Between Cameron Falls generating station and the Northern Empire Mine station, insulation was added and other changes were made in order that the operating voltage might be stepped up from 33,000 volts to 44,000 volts.



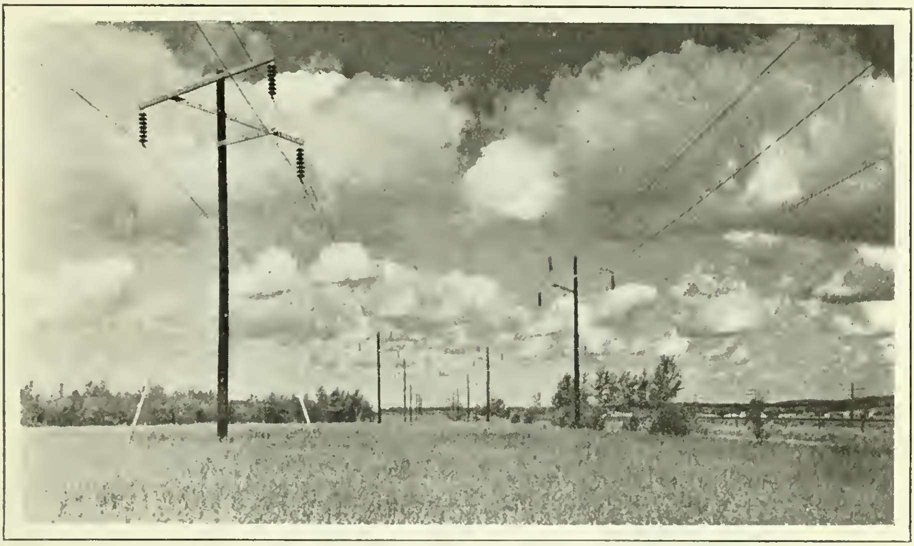
NORTHERN ONTARIO PROPERTIES—TRANSMISSION LINES

Timmins transformer station and 132,000-volt lines

NORTHERN ONTARIO PROPERTIES

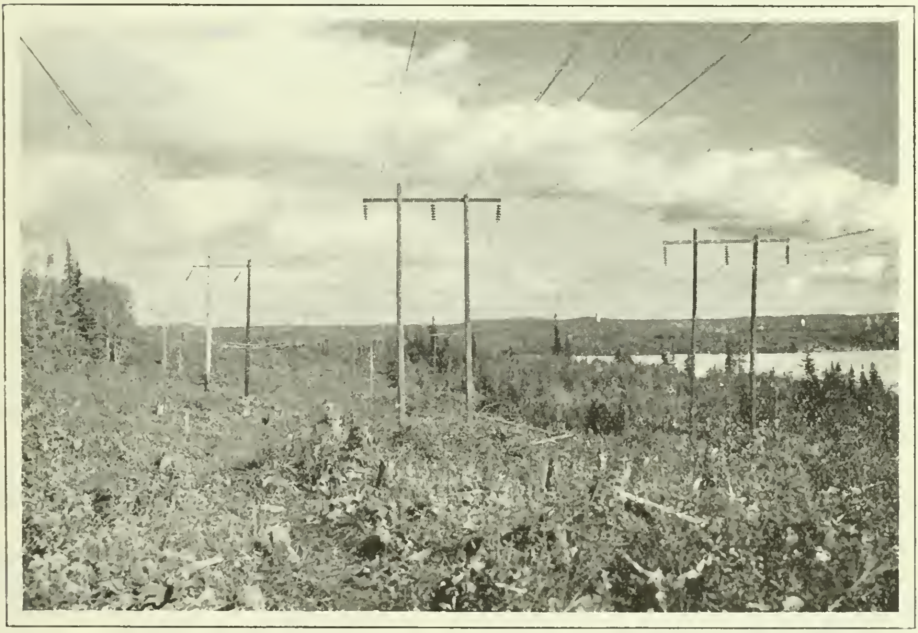
Abitibi District—132,000-volt Lines

Between Iroquois Falls junction and a new switching station near Kirkland Lake, a distance of 56.20 miles, the second single-circuit, 132,000-volt, wood-pole line was constructed. This line is of similar construction and is parallel to the first line built in 1934. At the Iroquois Falls end seven steel towers were erected to carry both circuits. The conductor for the steel tower section is 203,200-circular-mil a.c.s-r. which joins a section 37.28 miles long having No. 4/0 a.c.s-r., the remaining 18.14 miles to Kirkland Lake switching station having No. 2/0 copper conductor. The ground wire is $\frac{1}{4}$-inch steel cable.



NORTHERN ONTARIO PROPERTIES—TRANSMISSION LINES

Wish-bone type of construction on 132,000-volt lines in the vicinity of Matheson; Iroquois Falls-Kirkland Lake line



NORTHERN ONTARIO PROPERTIES—TRANSMISSION LINES

Three circuits of 132,000-volt lines adjacent to Kirkland Lake switching station

Between Kirkland Lake transformer station and Larder Lake transformer station 16 miles of single-circuit, 132,000-volt, wood-pole line were completed. This line has suspension type insulation and No. 2/0 copper conductors.

Between Abitibi Canyon generating station and Hunta junction inspection, and revision where needed, of the 132,000-volt, steel-tower lines taken over from the Ontario Power Service Corporation was completed.

Other Voltage Lines

A 26,400-volt connection was established between Larder Lake transformer station and Omega Mines transformer station by building 650 feet of single-circuit, wood-pole line.

Between a junction established on the Timmins-Pamour line and the Porcupine Gold Mine transformer station, 2,000 feet of 26,400-volt, single-circuit, wood-pole line was completed. The conductor is 3 0 a.c.s-r.

In order to connect mining loads to sources of supply 12,000-volt, single-circuit lines were built between Glenora junction and Glenora Gold Mines, 700 feet; Bidgood Kirkland Gold Mines and Moffatt-Hall Gold Mines, 0.80 mile; Kirkland Lake transformer station and Kirkland Gold Rand mine, 1.40 miles. Each of these extensions is equipped with a telephone circuit.

Sudbury District

Between Stobie junction and Sudbury distributing station, 3.27 miles of single-circuit, 22,000-volt, wood-pole line were completed. Materials used were salvaged from the recently purchased Treadwell Yukon line.

Between Coniston generating station and Neelon junction, 6.62 miles of recently purchased 22,000-volt, wood-pole line were overhauled.

Greater capacity was installed on the existing 22,000-volt line between Stinson and Coniston generating stations by replacing the No. 3 copper conductor with 336,400 circular-mil aluminum cable.

TELEPHONE LINES—ALL SYSTEMS

Between Allanburg junction and Dundas transformer station, telephone conductor was replaced and re-coordinated with power circuits for a distance of 6.5 miles between the Caledonia Stone Road and Dundas station.

In the vicinity of Hurontario Street, Cooksville, and Sheridan, 7.9 miles of telephone pole were rebuilt to accommodate telephone circuits removed from the Middle road.

Telephone circuits were transferred to rehabilitated low-tension pole line for a distance of 2.74 miles between Dundas transformer station and Nelson junction.

Various sections of telephone pole line were rehabilitated to accommodate rural power and joint use extensions in the Niagara, Georgian Bay and Eastern Ontario systems.

In the Northern Ontario Properties, telephone revisions were carried out in the vicinity of Coppercliff, Kirkland Lake, and Timmins, to meet the needs of power system extensions.

NORTHERN ONTARIO PROPERTIES — TRANSMISSION LINES

Transmission line, 26,400 volts, between Pamour Transformer station and Pamour Mine station. This line also carries control cables

DISTRIBUTION LINES AND SYSTEMS

In Appendix III is shown, in tabular form, the progress made in the installation of new rural lines in each rural power district.

The rapidly increasing demand for electrical service in rural areas has made necessary the construction of 769 miles of new lines during the year.

The following pages contain brief reference to the principal work for the several systems in constructing rural power district lines, feeder lines, and municipal distribution systems.

In addition to this general work certain studies and investigations have been made. The coordination of fuse links has resulted in fewer service interruptions and lower cost of operation. The design of an economical type of rural line, giving consideration to conditions in Ontario, particularly glaze and wind-storm loading, has received further study. Two engineering papers were prepared and presented at the meetings in Toronto of the American Institute of Electrical Engineers and the Association of Municipal Electrical Utilities.

NIAGARA SYSTEM

Rural Line Construction

Alvinston R.P.D.—N18D9—An extension of 6.1 miles of line was built north from Alvinston distributing station to serve a group of farmers.

Aylmer R.P.D.—N11D2—Extensions totalling 15.50 miles of new line were built, on 5 miles of which special conductor was used for long-span construction.

Baden R.P.D.—N7D1—In order to improve voltage conditions in New Dundee and vicinity, arrangements were made for a new source of supply at Mannheim, and 2.25 miles of three-phase heavy conductor tie line were built to connect existing lines in New Dundee to the new Mannheim distributing station. Considerable re-construction work was done in New Dundee at the same time. Extensions totalling 14.77 miles of new line were built in this district during the year.

Bond Lake R.P.D.—N3D3—The old line on Schomberg railway right-of-way has been almost completely removed and replaced with new lines on the public highway.

Brampton R.P.D.—N13D2—The 2,300-volt supply from Brampton distribution system was disconnected; a new three-phase rural circuit was built through the town; and now the whole district is supplied at 4,000/2,300 volts from Brampton distributing station.

Brant R.P.D.—N12D1—A new line 4.2 miles in length was built, for the Department of Indian Affairs, in the Six Nations Indian reserve to give service primarily to the hospital, police barracks, and council chamber at Ohswekin. In this case metering equipment is installed at the limits of the reserve.

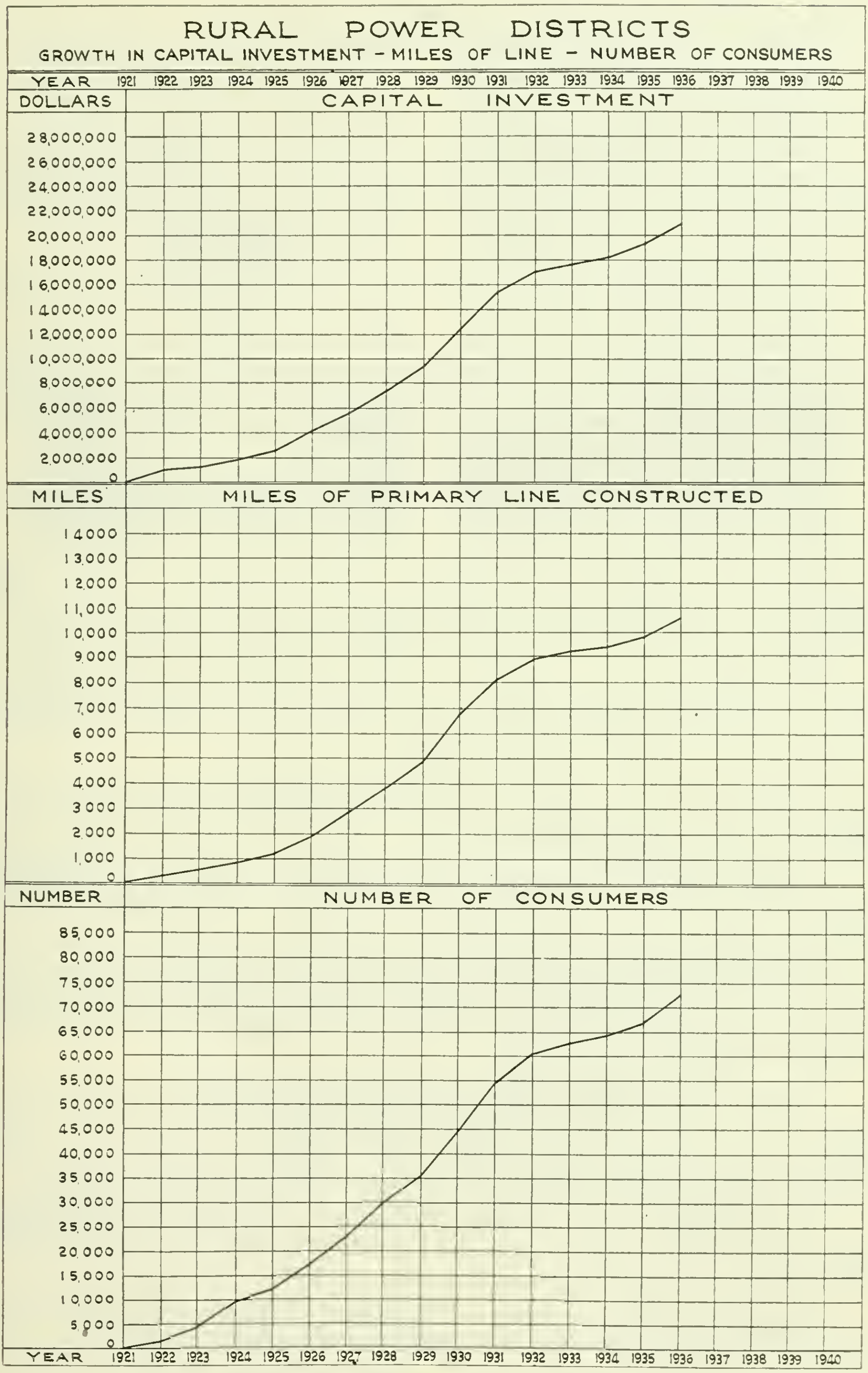
Chatham R.P.D.—N14D1—Extensions totalling 15.67 miles of new line were built and service given to hamlets of Dubuque and North Buxton, and Dover River road section. This includes a three-phase tie line 1.2 miles in length on Chatham distribution system poles from east to west limits of the city. The distribution system in the hamlet of Louisville was rebuilt to accommodate load increases.

Dorchester R.P.D.—N4D1—Two miles of rural line were rebuilt to replace deteriorated poles.

Dresden R.P.D.—N14D12—Extensions totalling 4.31 miles of line were built in this district which has previously been quite inactive. Service was given to the hamlet of Wabash and vicinity.

Dundas R.P.D.—N2D1—Extensions totalling 18.78 miles of new line were built, on part of which special conductor was used with long-span construction. Service was given to the hamlet of Mountsberg.

Haldimand R.P.D.—N2D8—Extensions totalling 18.14 miles of new line were built and service was given to consumers in South Cayuga, vicinity of Jarvis, and along the shores of lake Erie.



RURAL POWER DISTRICTS

GROWTH IN CAPITAL INVESTMENT - MILES OF LINE - NUMBER OF CONSUMERS

Keswick R.P.D.—N3D5—Considerable rehabilitation of existing lines and equipment was done to accommodate increasing load.

London R.P.D.—N4D2—Obsolete arresters and switches in the district were replaced.

Lynden R.P.D.—N2D2—A tie line was built to serve part of the district previously served from Dundas R.P.D., and to shorten the length of supply line to consumers in Sheffield and Rockton areas. An extension of 5.25 miles of line was built to serve consumers in Kirkwall and vicinity.

Norwich R.P.D.—N10D1—Extensions totalling 17.55 miles of new line were built during the year.

Preston R.P.D.—N6D1—Following investigations to determine the most economical method of improving voltage conditions in the suburban area south of Kitchener, work was started on a three-phase heavy conductor tie line to connect the new Mannheim distributing station to existing lines now fed from Preston distributing station.

St. Jacobs R.P.D.—N7D2—An investigation of methods of improving voltage conditions in this district was made and estimates submitted.

Saltfleet R.P.D.—N17D1—New tie lines were built to connect to the new Fruitland distributing station as an additional source of supply, and 50 per cent. of consumers previously supplied from the Dominion Power and Transmission 66.6-cycle lines were transferred to 25-cycle lines.

Sandwich R.P.D.—N15D1—Extensive reconstruction of lines in this district was done to accommodate increased load in the vicinity of Dillette Corners, Roseland, and Jacksons Corners.

Tilbury R.P.D.—N14D14—This district has previously been very inactive but during the year extensions totalling 18.66 miles of new line were built to serve rural consumers.

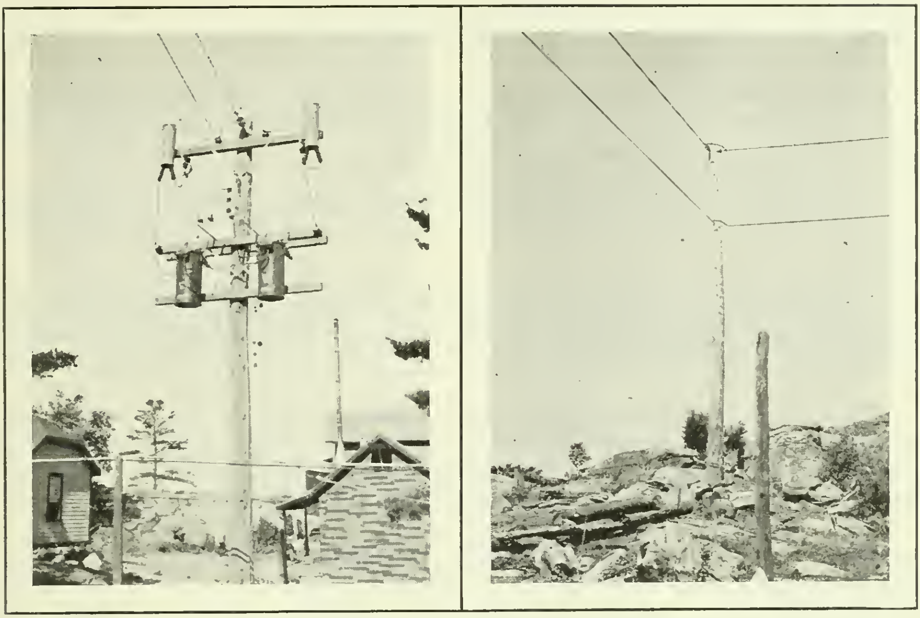
Tillsonburg R.P.D.—N10D4—Extensions totalling 17.26 miles of new line were built, on part of which special conductor was used for long-span construction.

Walsingham R.P.D.—N12D7—Extensions totalling 19.47 miles of new line were built during the year. The distribution voltage of the district was changed from 4,000/2,300 volts to 8,000/4,600 volts to accommodate increasing load and line extensions.

Waterdown R.P.D.—N2D3—Practically all consumers previously supplied from the Dominion Power and Transmission 66.6-cycle lines in this district were transferred to 25-cycle lines. Extensive changes were also made to permit road widening by the Department of Public Highways.

Woodbridge R.P.D.—N16D1—Extensions totalling 17.70 miles of line were built during the year, a large part of which was in the northern part of the district.

Woodstock R.P.D.—N10D2—Extensions totalling 12.55 miles of new line were built during the year. Obsolete arresters in the district were replaced.



RURAL ELECTRICAL SERVICE IN ONTARIO

Rural transformer installation supplying large hotel on Georgian Bay. Load is divided between two transformers so that in case of transformer failure, 50 per cent of the load will remain in service

Rural transmission lines in Muskoka frequently traverse rugged country. Illustration shows vertical construction at an angle pole

Distribution Feeder Construction

Baden D.S. to Wellesley—N735x6—A series of voltage and current charts were taken on this feeder indicating unbalanced loading. Several changes were made to balance the load and voltage conditions were considerably improved.

Fruitland D.S. to Stoney Creek—N1736x8—Construction was started on a new 25-cycle feeder line to serve consumers in Stoney Creek and vicinity, who are now being served from Dominion Power and Transmission 66.6-cycle lines.

GEORGIAN BAY SYSTEM

Rural Line Construction

Barrie R.P.D.—S4D1—Extensions totalling 15.36 miles of new line were built and service given to consumers in the hamlets of Edgar, Midhurst, Dalston and vicinity.

Dundalk R.P.D.—E5D1—A line 4.37 miles in length was built to serve consumers in the hamlet of Corbetton.

Gravenhurst R.P.D.—M4D1—A line 2.5 miles in length was built to serve the Muskoka Diatomite Ltd.

Hawkestone R.P.D.—S9D1—An extension of 4.2 miles of new line was built to serve consumers in the hamlet of Warminster and vicinity.

Meaford R.P.D.—E14D1—A line 5.14 miles in length was built to serve consumers in Sunnyside Beach and other summer resort areas. This district had previously been quite inactive.

Medonte R.P.D.—S18D1—Extensions totalling 13.86 miles of line were built and service given to consumers in Honey Harbor, Robins Point and vicinity.

Midland R.P.D.—S1D1—Extensions totalling 20.25 miles of new line were built and service given to consumers in the vicinity of Midland Point and Thunder Bay summer resorts.

Minden R.P.D.—C37D1—The first line in this district was built during the year to serve 40 consumers in the village of Minden and vicinity. Arrangements were made to purchase power from the Orillia Water, Light and Power Commission as a source of supply for this district.

Owen Sound R.P.D.—E2D1—A line, 6 miles in length, was built to serve consumers in the hamlets of Leith and Annon.

Sauble R.P.D.—E46D1—Consumers in the hamlet of Colpoys Bay and vicinity were given service.

Sparrow Lake R.P.D.—W1D1—A new line, 4.85 miles in length, was built to supply consumers in the vicinity of Floral Park on lake Couchiching.

Tara R.P.D.—E15D1—Extensions totalling 11 miles of line were built in this district, previously inactive, to serve consumers in the hamlet of Desboro and vicinity.

Tottenham R.P.D.—S34D1—The first line in this district was built during the year and an additional 4-mile extension is now in progress.

Uxbridge R.P.D.—W11D1—With the construction of 2.25 miles of tie line this district is now all fed from Uxbridge distributing station. Part of the district was formerly fed from Uxbridge distribution system.

EASTERN ONTARIO SYSTEM

Rural Line Construction

Cobourg R.P.D.—C13D1—A total of 10.83 miles of new line was built and service given to consumers in Minnatonka Park summer resort and other parts of the district.

Lindsay R.P.D.—C29D1—The capital and reserves of all lines and equipment in this district were transferred to Fenelon Falls R.P.D., thus combining the two districts.

Marmora R.P.D.—C47D1—The first line in this district 3.5 miles in length, was built to serve 15 consumers in the vicinity of Crow Lake summer resort.

Nepean R.P.D.—T1D1—Extensions totalling 10.02 miles of new line were built and service given to consumers in the vicinity of Vernon and Dalmeny.

Oshawa R.P.D.—C24D1—Extensions totalling 12.98 miles of new line were built during the year in this district.

Renfrew R.P.D.—QM16D1—Extensions totalling 19.58 miles of new line were built to serve consumers in Westmeath, Beachburg and Forresters Falls.

Williamsburg R.P.D.—L7D1—Extensions totalling 14.55 miles of new line were built and service given to new consumers in the vicinity of Elma, Dunbar, and Grantly. The voltage of the district was changed from 2,300 volts to 4,000 volts to accommodate increasing load and line extensions.

NORTHERN ONTARIO PROPERTIES

Municipal Distribution System

Hislop Townsite—FA1805—A complete distribution system was built to serve 55 consumers.

RURAL ELECTRICAL SERVICE IN ONTARIO

Rural line from Big Chute generating station passing through rugged country with spans of 400 feet and high-strength conductor

SECTION VII

TESTING — RESEARCH — INSPECTION

PRODUCTION AND SERVICE

THE Testing and Inspection department is composed of the Testing and Research laboratories, the Approvals laboratory and the Electrical Inspection division. These are essentially service organizations established for the benefit of the other departments of the Commission, the Hydro municipalities and their customers. Their duties cover a wide field of activity having to do with testing, inspection and research as related to the generation, transmission and utilization of electrical energy.

The functions of the Testing and Research laboratories include general testing, inspection and research work as required by the Commission and those purchasing or using its power. The laboratories have extensive facilities for electrical, chemical, photometric and structural materials testing or research work, and have a staff capable of conducting almost any kind of inspection work in this field. The Approvals laboratory provides a special service for the manufacturers and the public in the inspection and testing of electrical appliances and devices sold under strict requirements as to fire and shock hazard. The duties of the Electrical Inspection division are confined to the inspection of electrical wiring installations, and the administration of the Commission's regulations governing such work in the Province.

The Commission's research work is organized to take full advantage of the experience and talent of all members of the staff. This is accomplished through the Research Committee under whose direction subcommittees, with members selected from various departments, conduct researches in particular fields of work. Although most of the actual testing and investigational work is assigned to the laboratory staff, the subcommittee members lend valuable assistance towards deciding upon the most direct methods of attacking these problems or by making suggestions that are helpful in their solution.

Ten subcommittees have been actively engaged, new committees being organized during the year to study problems on water and concrete. The work is widely varied, but it is interesting to note that a large percentage of the problems under investigation deal with methods of prolonging the useful life of materials. Of these, outstanding examples are: the study of fatigue failures in power conductors due to line vibrations, deterioration of transformer bushings, ground line decay in wood poles, corrosion of domestic water tanks, and the disintegration of concrete. It is evident that such problems are of great economic importance to the Commission, and it is encouraging to report that substantial progress is being made in their study.

TESTING AND RESEARCH LABORATORIES

Routine and General Testing

The volume of work under this heading was well maintained during the year, 64,743 tests of all classes being made in the laboratory. Although this work consists largely of tests on materials purchased under specifications, and tests required for laboratory investigations or research projects, it has many ramifications in other activities of the department.

Much of this testing requires special equipment and a staff thoroughly trained in its use. An example of this is the fatigue testing of wire for which equipment was imported from England.

Materials and Equipment Inspection

Inspections of materials and equipment showed a substantial increase over last year. This is attributed to greater activity in field construction, extensions to rural lines, and to additional work involved in new inspection duties recently assigned to this department.

Transmission Line Materials

All materials used in transmission line construction are thoroughly inspected to ensure their compliance with purchase specifications. There was a large demand for this type of service, the total valuation of porcelain insulators and line hardware inspected being approximately twenty per cent greater than last year. Inspection of copper, aluminum and galvanized steel wire amounted to 1,210 tons. This is more than double last year's total, the increase being due largely to new work involved in the inspection of aluminum wire.

Structural and Reinforcing Steel

Inspection was completed of approximately 59 tons of structural steel for Rat Rapids and Ear Falls developments, and of 3½ tons of galvanized steel for Williamsburg station. Inspection was also made of a large tonnage of miscellaneous steel such as racks, gate checks, stairs, hangers, grating and cofferdam material, required for various power plants and station structures.

Reinforcing steel amounting to 114 tons was inspected for five major concrete construction or repair operations.

Equipment

Electrical equipment inspected included 67 power transformers and 616 distribution transformers of total capacity 62,914 kv-a, 6 oil circuit-breakers of total capacity 200,800 kv-a., and 199 switches of total capacity 1,168,000 kv-a. Items of powerhouse equipment inspected and released for shipment included one 1,500-kv-a generator, one 1,750-horsepower hydraulic turbine, one generator replacement shaft, two electric pumps, one 16-ton hoist, and many smaller items. Inspections in progress but not completed consist of one 4,500-kv-a generator and one 5,000-horsepower hydraulic turbine.

Following the fire at Stinson generating station, an inspection was made of the mechanical features of the power-house equipment to determine the extent of the damage.

Concrete

Resident concrete inspectors were stationed at construction projects at Rat Rapids, Galetta, McVittie and Niagara Falls, special attention being directed to the repair features involved. Several smaller operations were kept under observation, and assistance was given where conditions made it advisable.

Examination of the Commission's existing concrete structures for the purpose of detecting deterioration or recording its advance was continued. Thirty-two structures were inspected including two storage dams, 18 generating stations and related hydraulic structures, 7 transformer stations, 3 bridges in the Niagara district, tower footings at Burlington, and the canal walls at Queenston.

Paint

A complete inspection was made of the painted structures and equipment in the Thunder Bay district, details of which were submitted to our engineers in a comprehensive report.

Lamps

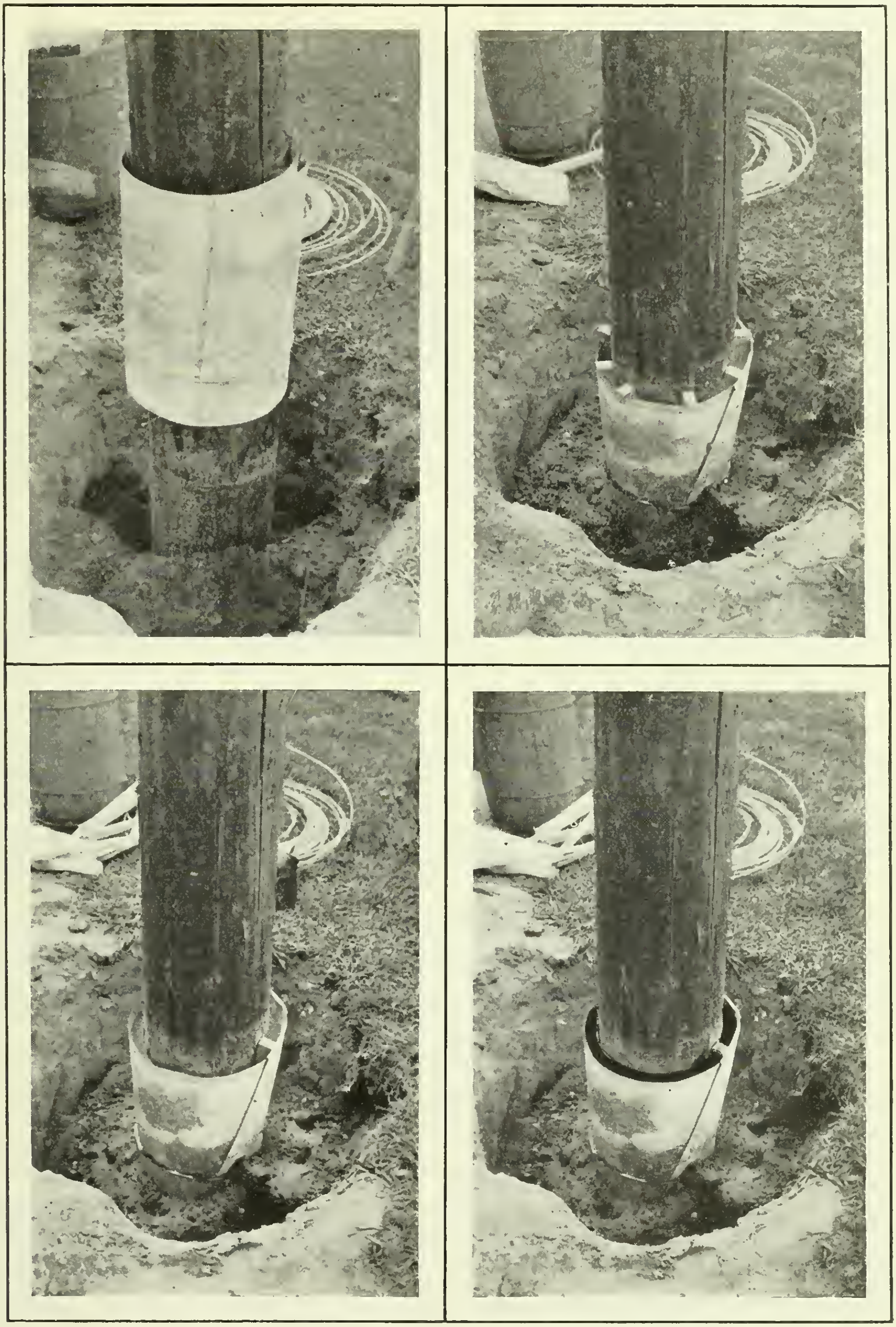
The testing and inspection of Hydro lamps sold throughout the Province was continued. A marked increase in the volume of this work was noted, 55,000 lamps being inspected at the factory and 3,800 life tests being made on lamps in the laboratory. Nearly four hundred additional lamp tests were made where information of a special nature was required.

Research

Following the practice adopted in other reports, many of the investigations conducted are classified under general headings signifying the reasons prompting their study. Others that are continuous in character, or are related to one class of material, are treated under separate headings.

New Methods and Materials

The laboratories render a service in the investigation of new materials or methods proposed for use in the Commission's operations. In this way worthy materials or methods are adopted on the basis of facts revealed in their investigation, while those found unsuitable for use, are dismissed without the costly experience that might result if they were directly applied in the field without trial. Typical examples investigated include wood strain insulators and various items of transmission line hardware, welding electrodes, rubber gloves, cleaning solutions for cable sleeves, alkali-resisting floor paints, thermostats, top lubricants for motor cars, and lighting devices.



PRESERVATIVE TREATMENT OF WOOD POLES IN PLACE BY SAND-CREOSOTE COLLAR

A—Sheet of galvanized iron wrapped around pole and tied with aluminum wire

B—Collar lowered to position, wedges placed and partly filled with sand

C—Temporary wedges removed

D—Sand creosote collar installed ready for back-filling

Investigation of Troubles

A large variety of problems arising out of troubles experienced in the field were referred to the laboratory for investigation. Of these, mention may be made of the following: the cause of failure of a generator shaft, fracture of the steel rib of a lineman's climbing spur; the occurrence of high-voltage surges on house circuits during the use of oil-burning equipment; the cause of scale formation on water-heating equipment, and the digestion of insulator pins due to static streams on insulators.

Investigations Leading to Improvement in Methods or Materials

It is the constant endeavour of the laboratories to improve upon existing practice where field experience indicates that methods or materials now in use leave something to be desired. Many problems, initiated by the need for such improvement, were studied, chief amongst which were:

> The study of methods for testing transformer and oil-switch bushings to detect deterioration in the initial stages of development. This study resulted in the development of a satisfactory field method for testing on circuits of low capacity.
>
> The development of a test for determining the resistance of joints in line conductors. A simple method was devised for measuring these resistances without having to dismantle the line.
>
> The investigation of fillet designs to determine their effect on the strength of shaft keyways. Physical tests were made on five different designs.
>
> Further study of test methods for determining the life expectancy of transformer oil. Special equipment was assembled and tests are proceeding.
>
> A large scale dead weight test on a pole and crossarm assembly for high voltage lines. This work was done in co-operation with the Engineering department.
>
> Oscillograph tests on a 25,000-kv-a synchronous condenser at Leaside to determine the most suitable time delay and other operating conditions favourable to closing circuit breakers when connecting the machine to the line. Assistance was also given to a power company in studying transient characteristics of a similar type of machine.
>
> Study of methods of conditioning air breakers to avoid corrosion of contacts without impairing their electrical characteristics.

Treatment of Wood Poles

The study of wood pole treatments for protection against ground line rot has been pursued steadily. Considerable time was spent in development tests for the sand-creosote collar treatment, which has now been adopted on a large scale for poles in service. Two other types of treatment were studied, but were not found to have sufficient merit to justify their general use.

Studies were continued of the properties of pine and spruce; stubs treated in various ways being set out for observation in the proving ground at Barrie. Annual inspections were made of the test beds at Leaside and Barrie, and of poles in service near Balsam and Southcote.

Paint

Work under this heading was confined to an extensive investigation on insulating varnishes and enamels to determine the best materials for powerhouse maintenance work. A detailed report on this investigation was prepared for the information of the Commission's engineers.

Oil

Much useful information was secured as a result of the year's activity in oil research. Typical investigations conducted in this field include: testing and classification of greases used in various power plants; tests on motor vehicle oils to compare their behaviour in service with their value as estimated by laboratory tests; annual tests on generator lubricating oils to determine their rate of deterioration in service; experiments on the centrifuge separation of acid sludge from insulating oils, and study of field tests for detecting moisture in transformer oil.

Heating Elements

The laboratories have undertaken a systematic study of electric range hotplates to determine their efficiencies and to investigate other practical features such as adequacy of insulation, speed of operation, probable life, and their ability to stand up under rigorous use in service. Practically all available types have now been tested.

Vibration of Transmission Line Conductors

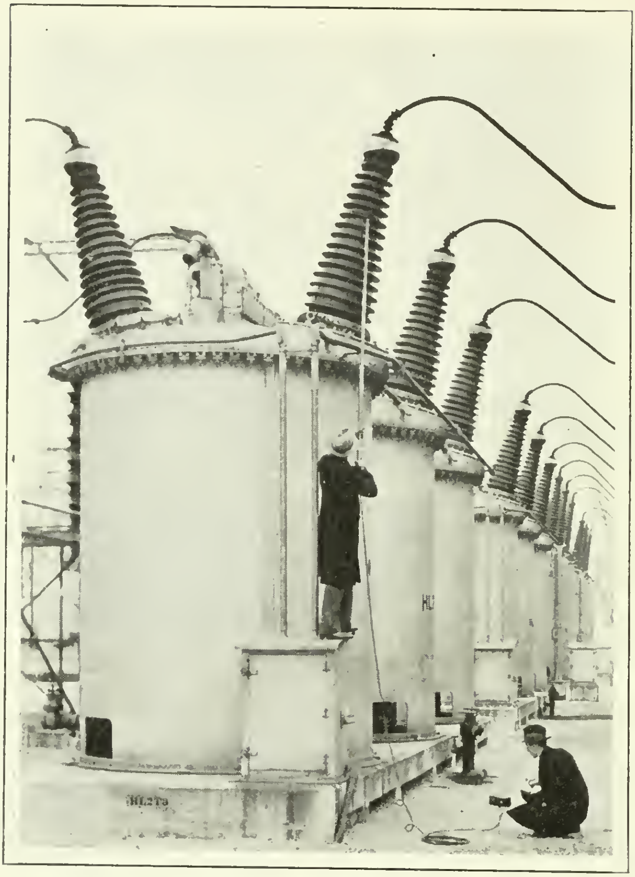
Members of the staff continued to devote much time and thought to the study of conductor breakages caused by line vibrations. Attention was directed to the mathematical features of the problem, and many days were spent in field testing of damping or protective devices. The combined theoretical and practical studies have resulted in the development of a new type of damping device that promises to be highly effective.

Closely associated with this problem is the study of fatigue and the endurance testing of conductor materials. Equipment for fatigue testing was recently installed, and an extensive programme of work is now proceeding. Enlightening results have already been obtained as to the effect of manufacturing processes on the fatigue limit of galvanized steel wire.

Other vibration investigations in progress are the endurance testing of tie connections for small conductors, and a study of the protection afforded by armour rod reinforcements.

Water Tank Corrosion

An important problem investigated was the corrosion of domestic water tanks, extensive tests being made to study the electrolysis of different metals and alloys when immersed in water at various temperatures. These tests have yielded significant results from which can be estimated the amount of corrosion likely to take place when two or more metals are present in electric water-heating installations. Assisted by the information revealed in these tests, steps are now being taken to obviate the trouble and to eliminate the necessity for costly replacements.



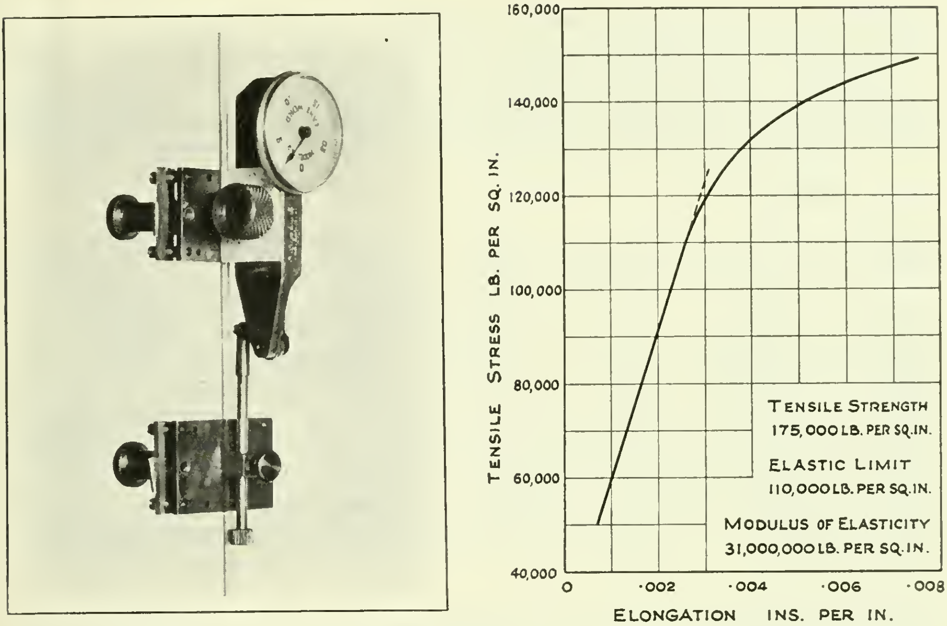
CHECKING THE CONDITION OF HIGH VOLTAGE BUSHINGS BY THE GRADIENT METHOD WITH LINES ALIVE

Concrete

The major item of work under this heading was a study of the durability and particularly the repair of concrete through field inspection of structures. Opportunities were offered to visit about forty-five structures, whose construction details and subsequent history were known. Mention should be made of the fact that this was the first year that definite indications were observed as to the success, or otherwise, of various methods of repair. This information has assisted our engineers in making decisions regarding recent repair operations.

Laboratory investigations included durability tests on shale contaminated aggregates, uniformity tests on plastic concrete, study of winter concreting problems, tests on cement accelerators, and a study of the properties of cinder concrete.

Concrete proportioning investigations were continued for current construction projects, five such studies being made during the year. Assist-



ANDERSON EXTENSOMETER AND TYPICAL STRESS-STRAIN CURVE
For 0.101-inch diameter wire in annealed condition

ance was also given in the selection of aggregates and proportions for small jobs and in the preparation of concrete specifications.

Miscellaneous Research

In co-operation with the Department of Marine, a study was made of the potential gradient on high-voltage arresters causing radio interference.

A group of watthour meters, which had been in service for a period of five years, were tested and compared with new meters to determine their ability to maintain their accuracy.

Miscellaneous

New Equipment

Several items of new equipment were purchased for the endurance testing of wire. These included a Haigh-Robertson fatigue testing machine, a bend-test machine, a twist-test machine, and a precision extensometer. A pulverizing machine was purchased for grinding coal samples, and two dial micrometers were added to the equipment of the insulated wire testing section.

Equipment designed and constructed in the laboratory included an automatic humidity cabinet, and an electric oven for testing insulated wire conductors. A concrete pier was constructed to strengthen the vibration test span.

Specifications and Committee Work

In co-operation with other departments, specifications were prepared or drafted for arc welding, copper wire, and certain grades of generator lubricating oil. Preliminary work was done towards preparing new specifications for bolts and line hardware.

Members of the staff continued to co-operate with various outside technical and standardization committees where the interests of the Commission warranted.

Lighting Service

The growing demand by the public for information on the requisites of good lighting is reflected in the number of requests received for this type of service. During the year, 137 lighting plans were supplied in response to customers' requests, and recommendations were made in 39 other cases where detailed plans were not required. Co-operation was given in the planning of school lighting, 390 illumination surveys being made to secure data for this purpose. An active part was taken in planning and conducting a course of instruction for home lighting supervisors, and in 16 municipalities a member of the staff gave lectures and demonstrations for the benefit of the local electrical dealers. In addition, nine lectures were presented before service clubs or school boards, and two articles on lighting were prepared for publication.

Photometric Work

The Photometric laboratory tested various materials and studied many problems requiring light measurement or investigation. A typical example is the service rendered Canadian manufacturers in the testing of portable lamps and accessories under the specifications of the Illuminating Engineering Society of the United States. Nineteen tests were completed, and 5,600 certification tags were issued for lamps meeting the requirements of the Society.

Miscellaneous photometric work included tests on automobile safety glass and signal devices, tests on industrial fixtures and reflectors, gloss measurements, light meter calibrations, and a study of protective goggles.

APPROVALS LABORATORY

Statistical

The following table contains a summary of the testing and inspection work of the Approvals laboratory for the past three years:

	1934 number	1935 number	1936 number
Applications for approval tests	742	696	770
Applications for special inspection, etc.	267	362	320
Applications for listing only	54	32	61
Factory inspection reports	3,993	4,928	5,712
Labels sold (except conduit and wire, cord, cable, etc.)	1,057,378	1,435,906	1,865,500
Labels sold—conduit	705,000	653,600	900,000
Labels sold—wire, cord, cable, etc	438,000	499,000	594,000
Total number of labels sold	2,200,378	2,588,506	3,359,500

An increase of 11 per cent will be noted in the applications for approval tests as compared with the previous year. The number of factory inspection reports also increased. The same may be said of the sale of labels of all types and, with very few exceptions, of each type—the increase of total label sales being thirty per cent over the previous year.

Volume of wire, cable and conduit labelled for past three years:

	1934 M-ft.	1934 M-ft.	1936 M-ft.
Insulating wire (incl. R.C. fixture wire and heat-resisting wire and cord)	74,125	87,750	109,230
Insulated flexible cords	20,375	21,750	30,115
Heater cord	4,500	5,625	5,385
Armoured cable	9,150	8,250	12,560
Flexible steel conduit	150	200	250
Flexible non-metallic tubing	4,250	5,250	5,000
Non-metallic-sheathed cable	7,250	7,300	12,350
Rigid steel conduit (incl. elbows and nipples)	7,050	6,536	7,500

The increased use of the Commission's approval labels is shown very markedly in the volume of wire, cord, cable and conduit labelled as set forth in the preceding table, and particularly of non-metallic-sheathed cable, 69 per cent, and of armoured cable, 52 per cent. It will be seen that with the exception of two minor items this increase is 15 per cent or more.

It is also of interest to note that 217,000 radio labels were distributed, an increase of 80 per cent over 1935, and that portable lamp labels and fixture label sales increased 22.5 per cent and 12.7 per cent respectively.

Applications for approval may be sub-divided as follows:

	1934 number	1935 number	1936 number
Motor-driven appliances (incl. motors)	194	186	214
Electrically-heated appliances	201	192	191
Wiring devices (incl. temperature regulators)	96	88	111
Lighting devices (incl. electric signs)	112	87	115
Industrial control devices (incl. transformers, capacitors and rectifiers)	31	22	19
Wire, cable and cord (incl. cord sets and service entrance cable)	17	8	22
Radio, sound and picture appliances (incl. devices for suppression of radio interference)	38	32	34
Miscellaneous equipment and materials (incl. medical and dental equipment, welding machines and thermal insulation)	53	81	64

These figures show that, in general, the approval testing work has been divided in much the same way as in previous years.

Among the newer lines which have been submitted are: welding machines, large capacity rectifiers of the copper oxide type, short-wave therapeutic appliances, ice-cream-making machines, air conditioning appliances, and automatic control devices of several types. A new type of service entrance cable employing an uninsulated neutral conductor in a partially-armoured assembly has also been investigated and approved for trial installation.

Specifications

Summary of Work

	1934 number	1935 number	1936 number
Specifications in process by Canadian Engineering Standards Association at beginning of year	17	17	20
Specifications printed and issued	7	9	11
Other specifications advanced to C.E.S.A. form	1	12	11
Other specifications begun by laboratory staff	8	4	3
Meetings of C.E.S.A. specification panel attended by staff	9	14	12
Average attendance by staff members	3.0	2.5	3.5
Other meetings relating to Approvals work	2	1	4

Other discussions relating to specifications concerning identifying markers for wire and cord assemblies, capacitors for suppression of radio interference, grading of flexible cords and other items, were carried on by interviews and correspondence.

Enforcement

With the change at the beginning of 1936 in the tariff regulations affecting many lines of electrical merchandise being imported from the United States, the problem of enforcement of the regulations as to control of sale, installation and use became more difficult. This was especially so in radio appliances. The Canadian standard for these devices does not recognize the more cheaply constructed "a.c.-d.c." types for the reason that many of them have been shown to have inherent fire and shock hazards. They also have poor operating characteristics on 25-cycle circuits. That this did not seriously affect the output of standard approved sets in Canada may be seen by reference to the note above on the increased use of radio labels.

The regulation permitting the free entry of goods by citizens of Canada, under certain conditions, allowed many electrical appliances of a substandard, or unapproved type, to be brought into Ontario. Such devices, however, could not legally be imported for resale so that there was a definite limitation to this practice.

The Commission has received the whole-hearted support of the electrical jobbing and purchasing group of the industry in the Province, thus making it unnecessary, except in a few instances, to bring police court proceedings to stop the sale of unapproved electrical equipment.

Miscellaneous

Improvements in Approvals testing equipment, included the construction by members of the staff, of two small electrically-heated and controlled ovens, one for use in the "Geer" oven test for vulcanized rubber, and the other for use in the testing of switches and similar devices. An additional dial micrometer was purchased and altered to meet the requirements of wire inspection.

The stock of samples submitted for approval was transferred to new quarters and placed in charge of an experienced man. A new form of approval label of the transfer type for electric signs was prepared and issued to replace the brass embossed label previously used. The transfer labels for "service box", "motor starter" and "special switch" were also superseded by a new form of label bearing the one name "Enclosed Switch" but made in three ratings. These latter labels follow the Specification for enclosed switches recently issued as Specification C22.2 No. 4 of the Canadian Electrical Code, Part II.

No market samples of wire, conduit or other material were purchased, the factory inspection work and control by labelling apparently working well to keep these products up to the accepted standard. In this connection it should be noted that the Canadian standard for "heater cord" differs slightly from that of Underwriters' Laboratories, and a bulletin was issued pointing out that the rubber insulation on all such cords offered to the Canadian trade shall be vulcanized to prevent short circuits at the attachment plugs connected thereto.

ELECTRICAL INSPECTION DEPARTMENT

The Electrical Inspection department was reorganized at the beginning of the fiscal year 1935. Prior to being reorganized, the department embraced thirty-two electrical inspection districts. In the reorganization, ten district offices were closed.

Owing to an increasing volume of business, in 1936, it was found necessary to re-open the Windsor and Sarnia offices and to divide the districts of Barrie and Kitchener into two sections each. The Barrie sub-office is in Baysville, the rural power district superintendent acting as district inspector. The Kitchener sub-office is in Owen Sound, an inspector from Kitchener having been transferred to Owen Sound.

Statistical

The volume of work, handled by the department, showed a decided improvement over 1935. A total of 92,845 permits were issued, an increase of 9,930 or 12 per cent over 1935; and 148,598 inspections were made, an increase of 6,994 or 4.9 per cent.

The accompanying graph shows the number of permits issued and inspections made since 1921.

Fires Attributed to Electricity

A large number of fires are reported to the department, each year, as having been due to defective electric wiring or equipment. In a great many instances any evidence which would afford positive proof as to the origin has been destroyed by the fire and considerable doubt exists as to the correctness of the information furnished. The records of the department, it is believed, are reliable. Twenty fires were found to have been due to electrical defects as compared with fourteen in 1935. They have been classified as to origin as follows:

Origin	Number
Armoured cable	7
Electric oven, not approved type	1
Extension cord	1
Flexible cord used as circuit wire	2
Hotplate, installed in cupboard	1
Joints not properly made	3
Terminal on switch loose	1
Transformer breakdown	1
Wires not properly insulated	1
Short-circuit, caused by nail	1
Overloaded circuit	1

Electrocutions and Fatal Accidents

Six persons were electrocuted in Ontario this year, through contact with electric wiring or equipment coming under the jurisdiction of this department, and three persons received fatal burns. The individual causes are briefly cited below:

Man electrocuted while assisting in making transformer tests. Voltage 700 to 2,600.

Man electrocuted through coming into contact with a disconnect switch. Voltage of circuit 2,200.

Man electrocuted while cutting wood with a portable, motor-driven saw. Voltage of circuit 550.

Man electrocuted through coming into contact with a section of ungrounded armoured cable. Voltage of circuit 550.

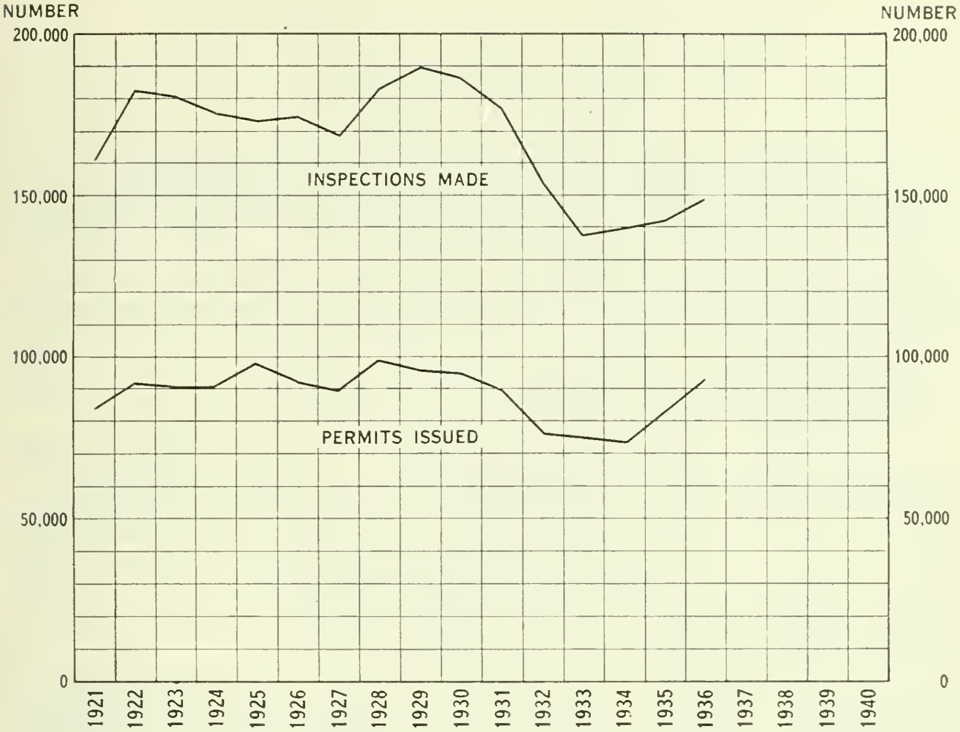
Man electrocuted through coming into contact with an ungrounded motor. Voltage of circuit 550.

Man electrocuted when attempting to renew fuse protecting a transformer. Voltage of circuit 2,200.

An electrician received fatal burns, caused by a flashover, while engaged in making repairs to an oil-circuit breaker. Voltage of circuit 6,600.

Woman received fatal burns through the improper use of a portable electric heater.

Woman received fatal burns when her clothing ignited through coming into contact with a portable heater, the guard of which was missing.



Ground Tests

In isolated communities and in rural districts 3,464 ground tests were made this year, an increase of 875 or 33 per cent. By the rules and regulations, these ground tests are required to be made in localities where no ground systems of known values exist, in order to minimize life and fire hazards.

Infractions of Regulations

Twenty-nine persons and companies were prosecuted during the year, for various infractions of the provincial rules and regulations, such as installing electric wiring and equipment without first having obtained a permit, selling electrical equipment not approved for sale within the Province of Ontario, or refusing or neglecting to remedy defects which constitute a life or fire hazard.

Re-wiring

As in previous years, the routine work of re-inspecting the older and more obsolete type of installation has been carried out. Towards the latter part of the fiscal year 1935, the department was requested by the Liquor Control Board to make a general inspection of all hotels throughout the Province. This request followed two fires which caused loss of life on hotel premises. This work was completed in the spring of this year. In all, 3,419 installations were brought up to a reasonable standard of safety at an approximate cost of $220,000.

PRODUCTION AND SERVICE DEPARTMENT

This department is housed in the Service building, Strachan avenue. It includes the machine shop, carpenter shop and garage repair shop.

The machine shop is maintained to assist the engineering departments in the development, design and construction of apparatus and equipment of a special character. Among the items of equipment which have been thus produced may be mentioned: line hardware, air-break switches, air-insulated current transformers, disconnecting switches, special equipment for making joints in line conductors, hydraulic presses, oil filter presses, pipe fittings, switchboard panels and accessories, telephone booth equipment, transformer tap changers, and live-line tools.

The carpenter shop supplies a general carpenter service for the Administration and Service buildings.

The garage is charged with the maintenance of the Commission's fleet of trucks, which number approximately 240. Periodic inspections are made of all trucks in the southern part of the Province, by travelling inspectors from the garage, and the work of overhauling and reconditioning trucks is done in the garage. Close contact and co-operation is maintained with the other departments of the Commission using trucks, with the object of maintaining all trucks in good operating condition, and of securing the maximum possible economy in their operation.

The work of this department has increased considerably during the past two years. Within the past fiscal year, approximately 1,100 orders were received in the machine shop, 275 in the carpenter shop. In the garage, 52 trucks were given a major overhaul, and in the last six months of the year more than 400 inspections were made in the field by three travelling inspectors. Attention was also given to the standardization of truck bodies and to the method of carrying on truck inspection including cost accounting.

SECTION VIII

ELECTRIC RAILWAYS

THE HAMILTON STREET RAILWAY COMPANY

A Subsidiary of The Hydro-Electric Power Commission of Ontario—Niagara System

Gross earnings on the Hamilton Street Railway for the year 1936 increased 8.97 per cent. Operating expenses (including taxes) increased 13.8 per cent. The increase in expenses was due in part to an increase in wages. The result was a decrease in net earnings of $13,890. The improvement in gross earnings was due to improved employment conditions in Hamilton.

The balance sheet and income account are given at the end of Section IX.

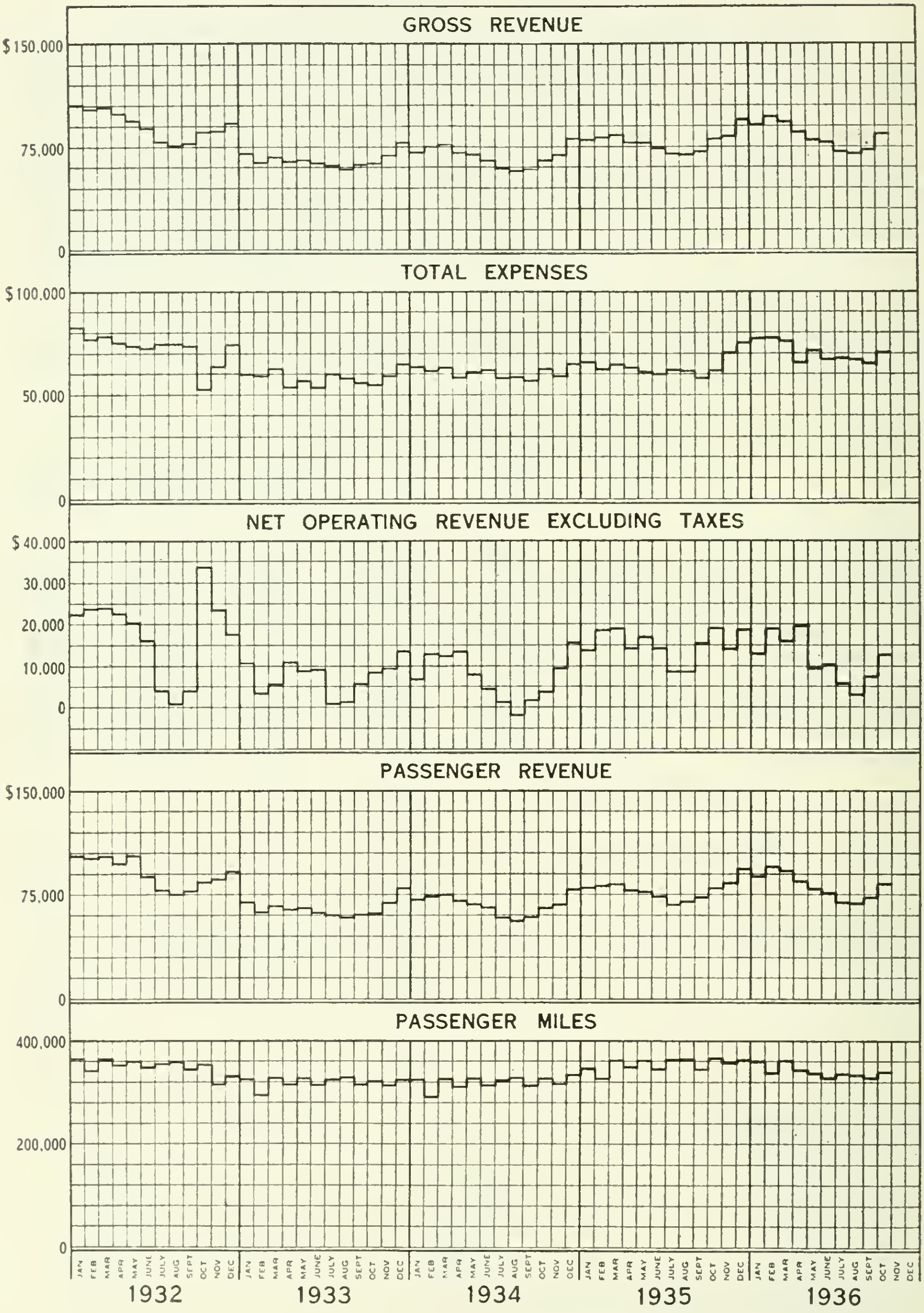
Operating results are summarized and compared in the following tabulation and chart.

HAMILTON STREET RAILWAY
Comparative Operating Statistics

	1935			1936		
	Tramways $	Buses $	Total $	Tramways $	Buses $	Total $
Operating revenues:						
Passenger	717,572	191,973	909,545	792,083	200,525	992,608
Freight	3,823	....	3,823	3,702	....	3,702
Other operations	6,456	579	7,035	6,065	575	6,640
Operating revenue	727,851	192,552	920,403	801,850	201,100	1,002,950
Operating expenses	577,097	172,963	750,060	686,639	167,222	853,861
Net operating revenues	150,754	19,589	170,343	115,211	33,878	149,089
Taxes	29,249	3,465	32,714	23,430	1,920	25,350
Net operating income	121,505	16,124	137,629	91,781	31,958	123,739
Interest on advances from Niagara System			10,292			6,257
Net income—before provision for depreciation			127,337			117,482
Depreciation			....			150,000
Net income			127,337			(32,518)
Dividend appropriation			127,337			nil

	1935	1936
Route-miles:		
Tramway	27.28	28.06
Bus	17.69	17.58
Total	44.97	45.64
Track-miles	43.45	43.45
Passenger cars operated	74	73
Passenger buses operated	30	31
Car-miles operated:		
Passenger cars	2,876,039	2,863,803
Passenger buses	1,298,997	1,301,886
Car-hours operated:		
Passenger cars	306,308	305,358
Passenger buses	105,080	105,620
Passengers carried	19,634,096	22,640,144
Percentage of transfer passengers to revenue passengers	19.5%	22.7%

THE HAMILTON STREET RAILWAY COMPANY
OPERATING STATISTICS



GUELPH RADIAL RAILWAY

Operated by The Hydro-Electric Power Commission of Ontario for the City of Guelph

There was no major commitment on capital account during the year. Essential maintenance on way and structures, and equipment was performed.

The balance sheet and income account are given at the end of Section IX.

Operating results are summarized and compared in the following tabulation and chart.

GUELPH RADIAL RAILWAY

Comparative Operating Statistics

	1935			1936		
	Tramways $	Buses $	Total $	Tramways $	Buses $	Total $
Operating revenues:						
Passenger	36,662	15,880	52,542	34,796	15,641	50,437
Freight	9,573	....	9,573	8,644	....	8,644
Other operations	468	38	506	491	40	531
Operating revenue	46,703	15,918	62,621	43,931	15,681	59,612
Operating expenses	51,978	16,837	68,815	52,419	15,627	68,046
Net operating deficit	5,275	919	6,194	8,488	54*	8,434
Taxes	244	....	244	246	....	246
Net operating loss	5,519	919	6,438	8,734	54*	8,680
Interest and instalment payment			†23,843			†23,787
Sinking fund			3,624			3,769
Renewals—buses			2,358			6,031
Total deficit			36,263			42,267

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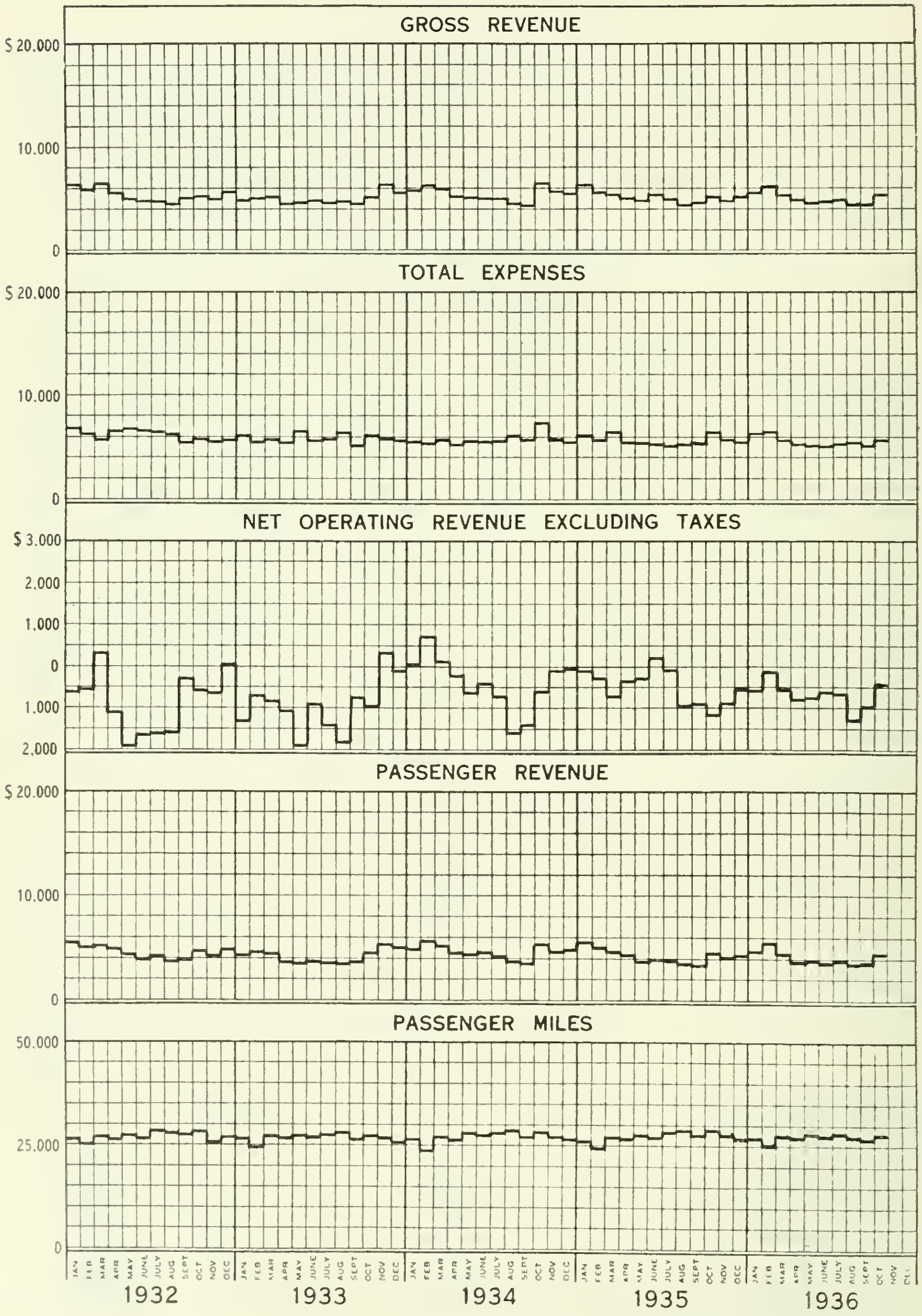
*Surplus.

†Includes $11,700 on purchase account, made up as follows:

	1935	1936
Amortization	$9,128	$9,543
Interest	2,572	2,157

	1935	1936
Route-miles:		
Tramway	6.41	6.41
Bus	5.99	5.99
Total	12.40	12.40
Track-miles	9.06	9.06
Passenger cars operated	7	7
Passenger buses operated	4	4
Car-miles operated:		
Passenger cars	226,892	223,302
Passenger buses	99,909	104,189
Freight locomotive	9,518	9,367
Car-hours operated:		
Passenger cars	27,510	27,139
Passenger buses	14,110	14,060
Freight locomotive	2,075	2,159
Passengers carried	1,119,719	1,089,551
Percentage of transfer passengers to revenue passengers	26.51%	27.29%

GUELPH RADIAL RAILWAY—OPERATING STATISTICS



SECTION IX

FINANCIAL STATEMENTS

Relating to

Properties Operated by The Hydro-Electric Power Commission in the Niagara, Georgian Bay, Eastern Ontario and Thunder Bay Systems on Behalf of Municipalities

and to

Northern Ontario Properties Operated by the Commission on Behalf of the Province,

The Hamilton Street Railway Company—A Subsidiary of Niagara System, and

Guelph Radial Railway—Operated by the Commission on Behalf of the City of Guelph

IN this section of the Report financial statements relating to the activities of The Hydro-Electric Power Commission, segregated into certain distinct divisions, are presented. The first division relates to those activities on behalf of the co-operative municipalities, which are partners in the main "Hydro" undertaking comprising the Niagara, Georgian Bay, Eastern Ontario and Thunder Bay systems and certain minor properties. The second relates to the administration of the Northern Ontario Properties which are operated by the Commission on behalf of the Province. The third and fourth relate to The Hamilton Street Railway Company, a subsidiary of the Niagara system, and to the Guelph Radial Railway operated by the Commission for the city of Guelph. For each of these divisions of the Commission's administrative work, there are presented a balance sheet and an operating and income account. In the case of the co-operative systems and the Northern Ontario Properties, supplementary statements respecting fixed assets, reserves, etc., more fully described below, are given.

Co-operative Systems

In the Foreword to this Report a brief reference is made to the basic principle governing the operations of the "Hydro" undertaking in supplying electrical service at cost, and to the *wholesale* and *retail* aspects of the work. A description is also given of the several systems into which the partner municipalities are co-ordinated for securing common action with respect to power supplies, through the medium of The Hydro-Electric Power Commission which, under The Power Commission Act, functions as their Trustee.

Although for the purpose of financial administration the various systems are separate units, there is a similarity of procedure with respect to their operation which enables certain financial statements, as for example the various reserves, to be co-ordinated and presented in summary tables.

The first set of tables in Section IX gives collective results for the co-operative activities related to the four systems and minor associated properties. These tables include a **balance sheet**; an **operating and income account**; a **summarization of cost distribution** as detailed in the "cost of power" tables referred to below; schedules respecting **fixed assets, capital expenditures and grants—rural power districts; power accounts receivable, funded debt issued or assumed, depreciation and obsolescence reserves, contingency reserves, sinking fund reserves** and the **account with the Provincial Treasurer of the Province of Ontario.**

The tables which follow these general financial statements relate more particularly to the individual municipality's aspects of the wholesale activities of the Commission and for each system show the **cost of power** to the individual municipal utilities, the **credit or debit** adjustment that is made at the end of the fiscal year, and the **sinking fund** equity that has been acquired by the individual municipality. There is also included for each system a **rural operating** statement.

The charges for power supplied by the Commission to the various municipalities vary with the amounts of power used, the distances from the sources of supply and other factors. The entire capital cost of the various power developments and transmission systems is annually allocated to the connected municipalities and other wholesale power consumers, according to the relative use made of the lines and equipment. Each municipality assumes responsibility for that portion of property employed in providing and transmitting power for its use, together with such expenses—including the cost of purchased power if any—as are incidental to the provision and delivery of its wholesale power. The entire annual expenses—including appropriations for reserves—incurred by the Commission in the supply of power at wholesale are thus paid out of revenues collected in respect of such power, through the medium of power bills rendered by the Commission. The municipalities are billed at an estimated interim rate each month during the year and credit or debit adjustment is made at the end of the year,* when the Commission's books are closed and the actual cost payable by each municipality for power received has been determined.

Included in the municipality's remittance to the Commission for the wholesale cost of power—besides such current expenses as those for operation and maintenance of plant, for administration, and for interest on capital—are sums required to build up reserves for sinking fund, for depreciation and obsolescence, and for contingencies. The first-mentioned reserve is for the purpose of liquidating the capital liabilities; consequently as capital obligations are discharged the plant will progressively be freed from interest expense. The other reserves are, respectively, being created to provide funds for the replacing or rebuilding of plant as it wears out, to enable the undertaking to replace existing equipment with improved equipment as it becomes available through advances in science and invention, and to meet unforeseen expenses which from time to time may arise.

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*The financial year for the Commission ends on October 31. The financial year for the municipal electric utilities, however, ends on December 31, and the municipal accounts are made up to this date, and so recorded in Section X.

The ultimate source of all revenue to meet costs—whether for the larger operations of The Hydro-Electric Power Commission or for the smaller local operations of the municipalities—is, of course, the consumer. Out of the total revenue collected by each municipal utility from its consumers for service supplied, only an amount sufficient to pay the wholesale cost of power supplied by the Commission as outlined above is remitted to the Commission; the balance of municipal electrical revenue is retained to pay for the expense incurred by the local utility in distributing the electrical energy to its consumers.

Tabular Data

The following comments relate to the tabular data presented:

Balance Sheet.—The first tabular statement given in Section IX is a balance sheet showing the assets, and the liabilities, reserves and equities of the several co-operative systems.

Operating and Income Accounts.—This statement, for each of the four systems, miscellaneous administrative and other properties, and certain electric railways, shows the operating revenues, operating expenses, including cost of power purchased, provisions for depreciation and contingencies, miscellaneous income, deductions from income including interest, etc., and sinking fund appropriations. On this table is also included similar information respecting properties operated for others, including Northern Ontario Properties, so as to present a combined total covering all properties operated by the Commission.

Summarization of Cost Distributions.—This statement is a summary of the "cost of power" tables relating to the individual systems as referred to more particularly below, and shows how the figures contained in the operating and income accounts are finally distributed among the various consumers.

Fixed Assets.—Details are given concerning the various fixed assets of each system and of the miscellaneous properties, whilst similar details are shown of the capital expenditures for the year ended October 31, 1936.

Capital Expenditures and Grants—Rural Power Districts.—This schedule gives summary information respecting the total capital expenditures on rural power districts and grants-in-aid of construction made by, or claimed from, the Province with respect to such rural districts.

Power Accounts Receivable.—This schedule sets forth the amounts collectible from all classes of power consumers and includes the annual adjustment figures from the "credit or charge" statements for municipalities. The main details of those debit balances three months or more overdue are stated.

Note—The annual adjustment figures from the "credit or charge" statements for rural power districts do not represent accounts receivable and these have therefore been shown on the balance sheet under the title of "rural power districts—rates suspense"

Funded Debt Issued or Assumed.—This schedule presents a complete list of the securities issued or assumed by the Commission on account of the several systems, the Northern Ontario Properties and the Guelph Radial Railway. It should be noted that where securities have been issued to finance properties operated for others, this liability is only shown in memorandum form on the balance sheet of the Commission, whilst the direct liability is shown on the balance sheets of the Northern Ontario Properties and the Guelph Radial Railway.

Depreciation and Obsolescence Reserves, and

Contingencies Reserves.—These schedules show the provisions made to, the expenditures from, and the balance to the credit of, these reserves for each of the systems and other properties included in the power undertakings operated on a cost basis.

Sinking Fund Reserves.—This schedule summarizes the appropriation of principal and interest with respect to these reserves for each of the systems and certain minor properties.

Account with the Provincial Treasurer.—This schedule lists, both for the Niagara and other systems operated on a cost basis, and for the Northern Ontario Properties operated for the Province, the advances from the Province of Ontario and the repayments which have been applied to reduce this liability. It should be noted that Provincial advances to finance Northern Ontario Properties are shown in memorandum form only on the balance sheet of the Commission as the direct liability is carried on the Northern Ontario Properties' balance sheet.

Following these statements, which are common to all systems, there are given for each of the individual co-operative systems four tabular statements as follows:

Cost of Power statement, which shows the apportionment to each municipality or rural power district of the items of cost summarized in the operating account, as well as the apportionment of the fixed assets in service listed in the balance sheet and the amount of power taken by each municipality. It should be noted that the cost of power given in this table is the wholesale cost—that is, the cost which the Commission receives for the power delivered from the main transformer stations serving the local utility or rural power district. In the case of rural power districts, the costs of power for the respective districts appear also in the "rural operating" statement, immediately following, as "cost of power delivered"; in the case of municipal electrical utilities not directly administered by the Commission, the respective costs of power appear in Statement "B" of Section X as "power purchased."

Rural Operating statement, which shows for each rural power district the various items of cost, and the revenues received, in connection with the distribution of electrical energy to consumers.

Credit or Charge statement, which shows the adjustments made in order to bring the amounts paid by each municipal electric utility and rural power district to the actual cost of service to each municipality or district. The credits and charges for the municipal electric utilities are taken up and given effect to in the accounts of "Hydro" utilities before their operating records of each year are closed.

The credits and charges for rural power districts are carried on the balance sheet of the commission as "rates suspense" items.

Sinking Fund statement, which gives the accumulated total of the amounts paid by each municipality and rural power district as part of the cost of power together with its proportionate share of other sinking funds.

Northern Ontario Properties

The statements and schedules respecting these properties which are operated by the Commission on behalf of the Province of Ontario include the balance sheet, operating and income accounts, schedules of fixed assets, depreciation and obsolescence reserves, and contingency reserves. These schedules are similar in form to the corresponding schedules relating to the co-operative systems.

The Hamilton Street Railway Company

This is a subsidiary of the Niagara system of the Commission. A balance sheet and operating and income account are presented.

Guelph Radial Railway

This railway is operated by the Commission on behalf of the city of Guelph. A balance sheet and operating and income account are presented.

Municipal Utilities

All municipal "Hydro" utilities have current expenses to meet similar to the expenses of the Commission and have adopted the same financial procedure with respect to their operations. In other words, concurrently with the creation of funds to liquidate their debt to the Commission and to provide the necessary reserves to protect generating, transforming, and transmission systems, the municipalities are taking similar action with respect to their local "Hydro" utility systems.

The balance sheets, operating reports and statistical data appearing in Section X, under the heading of "Municipal Accounts", relate to the operation of local distribution systems by individual municipalities which have contracted with the Commission for their supply of electrical energy. To this section there is an explanatory introduction to which the reader is specially referred.

Auditing of Accounts

The accounts of The Hydro-Electric Power Commission of Ontario are verified by auditors specially appointed by the Provincial Government. The accounts of the "Hydro" utility of each individual municipality are prepared according to approved and standard practice and The Public Utilities Act requires that they shall be audited by the auditors of the municipal corporation.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

FINANCIAL ACCOUNTS

For the Year Ended October 31, 1936

Relating to Properties operated on a "Cost Basis" for the Co-operating Municipalities and Rural Power Districts which are supplied with Electrical Power and Services from the following Properties:

- Niagara System
- Georgian Bay System
- Eastern Ontario System
- Thunder Bay System
- Bonnechere River Storage
- Nipissing Rural Power Districts
- Manitoulin Rural Power District
- Service and Administrative Buildings and Equipment

STATEMENTS

Balance Sheet as at October 31, 1936

Operating and Income Accounts for the Year ended October 31, 1936

Summarization of Cost Distributions for the Year ended October 31, 1936

Schedules supporting the Balance Sheet as at October 31, 1936:—

- Fixed Assets—By Systems and Properties
- Capital Expenditures and Grants—Rural Power Districts
- Power Accounts Receivable
- Funded Debt Issued or Assumed
- Depreciation and Obsolescence Reserves
- Contingency Reserves
- Sinking Fund Reserves
- Account with the Provincial Treasurer of the Province of Ontario

Detailed Statements for Municipalities and Rural Power Districts

THE HYDRO-ELECTRIC POWER

BALANCE SHEET AS AT OCTOBER 31, 1936

Niagara System **Eastern Ontario System**
Georgian Bay System **Thunder Bay System**

ASSETS

INVESTMENTS:			
Fixed Assets in Service:			
Niagara System	$214,701,358.23		
Georgian Bay System	9,428,078.21		
Eastern Ontario System	20,408,603.74		
Thunder Bay System	18,646,307.16		
Non-System properties	177,071.46		
Service and administrative buildings and equipment	3,104,154.23		
		$266,465,573.03	
Fixed Assets under Construction		360,450.38	
Preliminary Expenditures:			
St. Lawrence River surveys—1925 to 1928	$ 734,873.31		
Madawaska River power sites, surveys and plans—1929	850,000.00		
Other surveys, engineering and undeveloped power sites	476,022.01		
		2,060,895.32	
Miscellaneous Investments:			
Toronto, Pt. Credit, St. Catharines Radial Rlys.—secured	$ 1,905,002.00		
The Hamilton Street Rly., Co.—capital stock and advances	3,083,818.42		
Investment securities	2,385,124.00		
Sale agreements and Mortgages	1,162,740.71		
		8,536,685.13	
			$277,423,603.86
CURRENT AND ACCRUED ASSETS:			
Cash in banks		$ 832,005,.28	
Special deposits for matured interest and debentures unpaid		104,405.85	
Sundry accounts receivable		173,533.94	
Power accounts receivable		3,538,797.39	
Interest receivable		611,054.96	
Northern Ontario Properties		873,403.41	
Rural district loans		90,909.21	
Consumers' and contractors' deposits:			
Special deposits	$ 33,762.29		
Securities—at par value	496,100.00		
		529,862.29	
			6,753,972.33
DEFERRED DEBITS:			
Rural Power Districts—rates suspense		$ 336,825.23	
Maintenance materials and supplies		534,461.31	
Construction materials and supplies		671,455.45	
Construction and maintenance tools and equipment		619 585.44	
Office furniture and equipment		56,073.21	
Prepayments		97,417.63	
Work in progress—water heater campaign		901,580.95	
Work in progress—deferred work orders		74,384.13	
Unamortized debenture discount		193,033.07	
Miscellaneous deferred debits		150,701.37	
			3,635,517.79
SPECIAL FUNDS:			
Reserve Funds:			
Investments	$ 40,241,610.49		
*Amount receivable from current assets—per contra	181,987.13		
		$ 40,423,597.62	
Employers' Liability Insurance Fund:			
Investments	$ 877,816.10		
Deposits with the Workmen's Compensation Board	41,383.80		
*Amount receivable from current assets—per contra	24,683.94		
		943,883.84	
Pension Fund:			
Investments	$ 4,535 143.50		
*Amount receivable from current assets—per contra	100,502.03		
		4,635 645.53	
Sinking Funds:			
Investments	$ 5,819,383.85		
Deposits in the hands of trustees	257,575.05		
Deposit with Provincial Treasurer	1,692,303.14		
*Amount receivable from current assets—per contra	37,968.88		
		7,807,230.92	
			53,810,357.91
			$341,623,451.89

Approved by:—

A. Murray McCrimmon – Secretary and Controller.
T. S. Lyon – – – Chairman of the Commission.
A. W. Roebuck – – – – – – – – Commissioner.
T. B. McQuesten – – – – – – – – Commissioner.

COMMISSION OF ONTARIO

IN WHICH THE FOLLOWING PROPERTIES ARE INCLUDED:

Local Distribution Systems	**Bonnechere River Storage**
Rural Power Districts	**Service and Administrative Buildings and Equipment**

LIABILITIES, RESERVES AND EQUITIES

GRANTS IN AID OF CONSTRUCTION			
Province of Ontario—for Rural Power Districts			$ 10,232,098.78
LONG-TERM LIABILITIES:			
Funded Debt Issued or Assumed	$109,340,242.50		
Less—Treasury Securities—pledged for bank loan	1,200,000.00		
Funded debt in the hands of the public	$108,140,242.50		
Less—Hydro-Radial debentures assumed by the Sandwich Windsor & Amherstburg Rly., Co., and the Province of Ontario	5,816,205.00	$102,324,037.50	
Less—Debentures issued to finance properties operated for others:			
Northern Ontario Properties	$ 22,626,950.00		
Guelph Radial Railway	300,000.00	22,926,950.00	
		$ 79,397,087.50	
Advances from the Province of Ontario	$164,049 412.49		
Less—Advances for Northern Ontario Properties	7,168,053.63	156,881,358.86	236,278,446.36
CURRENT AND ACCRUED LIABILITIES:			
Bank of Montreal—demand loan		$ 500,000.00	
Accounts and payrolls payable	$ 1,235,472.92		
Less—Amount for Northern Ontario Properties	100,191.81	1 135,281.11	
Matured debenture interest unpaid		98,350.85	
Matured debentures unpaid		6,055.00	
Debenture interest accrued		958,512.00	
Miscellaneous accrued liabilities		1,091,827.77	
Power accounts receivable—credit balances		27,538.95	
Advances from the Province of Ontario for rural loans		94,124.59	
Liability for consumers' and contractors' deposits		550,115.78	
		$ 4,461,806.05	
*Liability to special funds—per contras		345,141.98	4,806,948.03
DEFERRED CREDITS:			
Rural Power Districts—rates suspense		$ 1,254,978.41	
Rural Power District grants in suspense		13,009.32	
Unamortized premium on debentures		251,356.73	
Miscellaneous deferred credits		184,578.49	1,703,922.95
RESERVES:			
Depreciation and obsolescence reserves:			
Additions to property through depreciation and obsolescence reserves	$ 2,897,385.97		
Depreciation and obsolescence reserve funds	31,334,861.16	$ 34,232,247.13	
Contingency reserves	$ 7,059,602.68		
Stabilization of rates reserve	1,963,599.60		
Fire insurance reserve	65,534.18	9,088,736.46	
Employers' liability insurance reserve		943,883.84	
Pension fund reserve		4,635,645.53	
Miscellaneous reserves		612,569.52	49,513,082.48
EQUITIES OF MUNICIPALITIES AND RURAL POWER DISTRICTS:			
Municipalities' and Rural Power Districts' equities being the accumulated contributions of consumers including interest accretions for annual sinking fund appropriations, represented by:			
Funded debt retired through sinking funds		$ 8,557,843.13	
Provincial advances retired through sinking funds		22,723,879.24	
Sinking funds		7,807,230.92	39,088,953.29
			$341,623,451.89

Auditors' Certificate

We have examined the Books and Accounts of The Hydro-Electric Power Commission of the Province of Ontario for the year ended the 31st October, 1936, and report that, in conjunction with our Annual Report to the Lieutenant-Governor in Council, in our opinion the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Commission's affairs at the 31st October, 1936, according to the best of our information and the explanations given to us and as shown by the books of the Commission We have obtained all the information and explanations we have required.

Oscar Hudson and Co.,
Chartered Accountants,
Auditors.

Dated at Toronto, Ontario,
12th April, 1937.

THE HYDRO-ELECTRIC POWER
Operating and Income Accounts

	Niagara System	Georgian Bay System	Eastern Ontario System	Thunder Bay System
	$ c.	$ c.	$ c.	$ c.
Operating Revenues: as per cost statement	23,960,165.84	1,085,545.99	3,074,427.97	1,534,277.50
Operating Expenses:				
Power purchased	3,110,848.14	53,545.91	869,352.72	....
Operation, maintenance and administration expenses	4,461,243.58	379,935.24	819,378.24	242,644.51
Depreciation provision for the year:				
Principal—as per cost statement	1,631,383.24	131,661.80	251,545.62	159,401.00
Interest at 4% on reserves' balances	931,158.53	70,546.58	154,259.70	70,553.26
Total provision	2,562,541.77	202,208.38	405,805.32	229,954.26
Contingency provision for the year:				
Principal—as per cost statement	604,475.08	28,079.05	57,884.54	85,856.94
Interest at 4% on reserves' balances	151,222.83	19,754.93	51,929.61	29,861.18
Total provision	755,697.91	47,833.98	109,814.15	115,718.12
Total operating expenses	10,890,331.40	683,523.51	2,204,350.43	588,316.89
Net Operating Income	13,069,834.44	402,022.48	870,077.54	945,960.61
Non-Operating Income:				
Miscellaneous interest income	17,950.17	1,552.54	4,759.90	1,424.59
Income from reserve fund investments	1,279,380.99	97,916.38	217,591.16	116,917.99
Income from sinking fund investments	406,315.43	10,634.69	*205,873.63*	*3,881.32*
Interest during construction	2,995.31	118.96	496.98	182.10
Miscellaneous non-operating income	58,750.43	....	....	....
Contributions from others	....	....	....	....
Interest and dividends from subsidiaries	160,929.52	....	....	....
Inter-system interest adjustments	155,784.53	11,647.22	26,009.54	13,975.66
Total non-operating income	2,082,106.38	121,869.79	42,983.95	128,619.02
Gross Income	15,151,940.82	523,892.27	913,061.49	1,074,579.63
Deductions From Gross Income:				
Interest on long-term debt:				
H-E.P.C. debentures	2,798,667.39	2,570.37	7,337.86	19,882.21
Ontario Government bonds, 1935	283,931.52	17,223.00	6,913.26	21,595.91
Ontario Government bonds, 1936	6,541,706.96	360,828.10	688,197.59	812,023.33
Exchange and commission:				
H-E.P.C. debentures	9,935.22	....	....	....
Ontario Government bonds	77,663.72	4,283.79	8,170.34	9,640.41
Amortization of debt discount and expense	24,905.42	67.05	297.52	806.52
Amortization of premium on debt	*47,570.47*	....	....	....
Miscellaneous interest deductions	107,404.90	1,099.84	9,186.95	6,658.50
Adjustments for surveys, etc.	57,246.26	454.09	*54,848.86*	*2,853.34*
Total deductions from gross income	9,853,890.92	386,526.24	665,254.66	867,753.54
Net Income	5,298,049.90	137,366.03	247,806.83	206,826.09
Disposition of Net Income:				
Sinking fund appropriation:				
Principal—as per cost statement	2,109,394.94	89,697.31	187,230.65	148,812.06
Interest at 4% on reserves' balances	1,225,055.36	47,668.72	60,576.18	58,014.03
Total appropriation	3,334,450.30	137,366.03	247,806.83	206,826.09
Rate stabilization appropriation	1,963,599.60	....	....	....
Total disposition of net income	5,298,049.90	137,366.03	247,806.83	206,826.09
Surplus (or *Deficit*) After Sinking Fund and Rate Stabilization Appropriations	....	....	....	....

COMMISSION OF ONTARIO
for the Year Ended October 31, 1936

Non-System Properties	General purposes and service and administrative buildings and equipment	Radial railways, Toronto Port Credit St. Catharines Toronto and York	Total for power undertakings operated on a "cost basis"	The Hamilton Street Railway Company—a subsidiary of Niagara System	Properties operated for others		Combined total, covering all properties vested in, or operated by, the Commission
					Northern Ontario Properties	Guelph Radial Railway	
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
23,538.56	559,543.07		30,237,498.93	1,002,949.75	2,242,238.64	59,612.22	33,542,299.54
9,331.98			4,043,078.75		15,925.39		4,059,004.14
4,447.62	388,567.96		6,296,217.15	865,762.10	496,823.47	67,117.29	7,725,920.01
2,132.61	12,080.62		2,188,204.89	156,763.72	234,405.34	6,030.96	2,585,404.91
383.23	15,615.21		1,242,516.51		34,172.90	1,175.33	1,277,864.74
2,515.84	27,695.83		3,430,721.40	156,763.72	268,578.24	7,206.29	3,863,269.65
			776,295.61		27,199.64		803,495.25
162.59			252,931.14		11,441.36		264,372.50
162.59			1,029,226.75		38,641.00		1,067,867.75
16,458.03	416,263.79		14,799,244.05	1,022,525.82	819,968.10	74,323.58	16,716,061.55
7,080.53	143,279.28		15,438,254.88	*19,576.07*	1,422,270.54	*14,711.36*	16,826,237.99
	43,456.46		69,143.66			287.31	69,430.97
400.54	18,991.01		1,731,198.07		35,149.57	1,768.63	1,768,116.27
158.69	2,743.50	*5,209.19*	204,570.79			610.49	205,181.28
1.61		78,048.09	81,843.05		13,411.15		95,254.20
			58,750.43				58,750.43
		142,500.00	142,500.00				142,500.00
	30,934.41		129,995.11	*129,995.11*			
56.73	*54,635.57*	*24,608.72*	128,115.93		*25,793.18*		102,322.75
186.73	*20,379.01*	190,730.18	2,546,117.04	*129,995.11*	22,767.54	2,666.43	2,441,555.90
7,267.26	122,900.27	190,730.18	17,984,371.92	*149,571.18*	1,445,038.08	*12,044.93*	19,267,793.89
.13	11,824.82	143,078.72	2,983,361.50		700,276.58	15,000.00	3,698,638.08
211.21	*6,823.37*	*86.87*	322,964.66				322,964.66
3,899.63	60,059.50	28,132.73	8,494,847.84		349,678.12		8,844,525.96
			9,935.22		774.39		10,709.61
46.30	713.03	333.99	100,851.58		4,151.41		105,002.99
	468.18	10.25	26,554.94		2,926.67		29,481.61
			47,570.47			*246.97*	*47,817.44*
307.85	3,911.72	19,261.36	147,831.12		43,466.60		191,297.72
1.85							
4,466.97	70,153.88	190,730.18	12,038,776.39		1,101,273.77	14,753.03	13,154,803.19
2,800.29	52,746.39		5,945,595.53	*149,571.18*	343,764.31	*26,797.96*	6,112,990.70
2,413.98	24,782.72		2,562,331.66		377,670.61	3,159.00	2,943,161.27
386.31	13,169.47		1,404,870.07		13,185.32	610.49	1,418,665.88
2,800.29	37,952.19		3,967,201.73		390,855.93	3,769.49	4,361,827.15
			1,963,599.60				1,963,599.60
2,800.29	37,952.19		5,930,801.33		390,855.93	3,769.49	6,325,426.75
	14,794.20		14,794.20	*149,571.18*	*47,091.62*	*30,567.45*	*212,436.05*

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Operating and Income Accounts for the Years Ended October 31, 1935 and 1936

Niagara System
Georgian Bay System
Eastern Ontario System
Thunder Bay System
Local Distribution Systems
Rural Power Districts
Bonnechere River Storage
Service and Administrative Buildings and Equipment

	Year 1935-36	Year 1934-35	Increase or *Decrease*
	$ c.	$ c.	$ c.
OPERATING REVENUES	30,237,498.93	29,272,130.26	965,368.67
OPERATING EXPENSES:			
Power purchased	4,043,078.75	9,130,315.36	*5,087,236.61*
Operation, maintenance and administration expenses	6,296,217.15	6,072,694.50	223,522.65
Depreciation provision for the year:			
Principal amount	2,188,204.89	2,185,805.99	2,398.90
Interest at 4% on reserves' balances	1,242,516.51	1,118,374.15	124,142.36
Total provision	3,430,721.40	3,304,180.14	126,541.26
Contingency provision for the year:			
Principal amount	776,295.61	266,898.51	509,397.10
Interest at 4% on reserves' balances	252,931.14	358,951.83	*106,020.69*
Total provision	1,029,226.75	625,850.34	403,376.41
Total operating expenses	14,799,244.05	19,133,040.34	*4,333,796.29*
NET OPERATING INCOME	15,438,254.88	10,139,089.92	5,299,164.96
NON-OPERATING INCOME:			
Miscellaneous interest income	69,143.66	165,963.88	*96,820.22*
Income from reserve fund investments	1,731,198.07	1,698,798.22	32,399.85
Income from sinking fund investments	204,570.79	151,561.41	53,009.38
Interest during construction	81,843.05	101,113.59	*19,270.54*
Miscellaneous non-operating income	58,750.43	94,083.86	*35,333.43*
Contributions from others	142,500.00	180,016.89	*37,516.89*
Interest and dividends from subsidiaries	129,995.11	137,629.66	*7,634.55*
Inter-system interest adjustments	128,115.93	78,978.34	49,137.59
Total non-operating income	2,546,117.04	2,608,145.85	*62,028.81*
GROSS INCOME	17,984,371.92	12,747,235.77	5,237,136.15
DEDUCTIONS FROM GROSS INCOME:			
Interest on long-term debt:			
H-E.P.C. debentures	2,983,361.50	2,729,414.40	253,947.10
Ontario Government bonds, 1935	322,964.66		322,964.66
Ontario Government bonds, 1936	8,494,847.84	9,166,262.53	*671,414.69*
Exchange and commission:			
H-E.P.C. debentures	9,935.22	8,520.10	1,415.12
Ontario Government bonds	100,851.58	31,094.95	69,756.63
Amortization of debt discount and expense	26,554.94	14,660.40	11,894.54
Amortization of premium on debt	*47,570.47*	*41,072.80*	*6,497.67*
Miscellaneous interest deductions	147,831.12	77,530.40	70,300.72
Total deductions from gross income	12,038,776.39	11,986,409.98	52,366.41
NET INCOME	5,945,595.53	760,825.79	5,184,769.74
DISPOSITION OF NET INCOME:			
Sinking fund appropriation:			
Principal amount	2,562,331.66	2,414,170.58	148,161.08
Interest at 4% on reserves' balances	1,404,870.07	1,258,021.64	146,848.43
Total appropriation	3,967,201.73	3,672,192.22	295,009.51
Rate stabilization appropriation	1,963,599.60		1,963,599.60
Total disposition of net income	5,930,801.33	3,672,192.22	2,258,609.11
SURPLUS (OR *Deficit*) TO CONTINGENCY RESERVES	14,794.20	*2,911,366.43*	2,926,160.63

THE HYDRO-ELECTRIC POWER

Summarization of Cost Distributions

	Cost of power purchased	Operation, maintenance and administration expenses	Net financial expenses and direct interest credits to reserves	Depreciation and obsolescence provision	Contingency provision
	$ c.	$ c.	$ c.	$ c.	$ c.
NIAGARA SYSTEM:					
Municipalities	2,188,833.75	2,725,973.90	7,016,113.44	1,008,885.68	436,998.25
Rural power districts	102,949.44	199,303.83	390,571.63	68,174.71	25,934.28
Companies	801,565.52	987,366.14	2,250,363.25	294,195.92	135,315.97
Local distribution systems	17,499.43	80,263.28	74,151.20	13,131.81	6,025.99
Operation of power plants, transmission lines and transformer stations	3,110,848.14	3,992,907.15	9,731,199.52	1,384,388.12	604,274.49
Rural operating	961,373.80	468,336.43	347,175.94	246,593.95	
Intra-system eliminations	*961,373.80*				
Operating account—power undertakings	3,110,848.14	4,461,243.58	10,078,375.46	1,630,982.07	604,274.49
Rural lines operated by municipalities			845.80	401.17	200.59
	3,110,848.14	4,461,243.58	10,079,221.26	1,631,383.24	604,475.08
GEORGIAN BAY SYSTEM:					
Municipalities	42,217.16	255,873.25	286,231.78	79,069.84	21,953.65
Rural power districts	7,856.64	38,085.38	44,761.43	12,973.07	3,527.67
Companies and distributing systems	3,472.11	24,252.71	26,288.52	7,857.61	2,569.66
Operation of power plants, transmission lines and transformer stations	53,545.91	318,211.34	357,281.73	99,900.52	28,050.98
Rural operating	118,260.48	61,721.90	45,190.96	31,705.13	
Intra-system eliminations	*118,260.48*				
Operating account—power undertakings	53,545.91	379,933.24	402,472.69	131,605.65	28,050.98
Rural lines operated by municipalities		2.00	153.99	56.15	28.07
	53,545.91	379,935.24	402,626.68	131,661.80	28,079.05
EASTERN ONTARIO SYSTEM:					
Municipalities	621,537.14	401,212.55	485,822.96	111,777.44	35,822.63
Rural power districts	47,457.78	48,167.11	59,805.73	15,314.01	4,547.05
Companies	174,551.95	158,327.96	213,571.25	49,669.23	15,276.14
Local electric distribution systems	13,554.04	37,609.23	26,678.19	8,602.81	1,359.38
Local gas distribution system		16,486.76	1,228.29		
Pulp mill	12,251.81	33,976.09	15,131.07	2,149.21	879.34
Operation of power plants, transmission lines and transformer stations	869,352.72	695,779.70	802,237.49	187,512.70	57,884.54
Rural operating	198,483.81	123,598.54	86,798.71	64,032.92	
Intra-system eliminations	*198,483.81*				
Operating account—power undertakings	869,352.72	819,378.24	889,036.20	251,545.62	57,884.54
THUNDER BAY SYSTEM:					
Municipalities		158,247.45	607,329.53	109,831.90	58,799.67
Rural power districts		1,169.86	2,608.41	508.86	254.49
Companies		79,139.85	284,684.34	47,993.16	26,802.78
Operation of power plants, transmission lines and transformer stations		238,557.16	894,622.28	158,333.92	85,856.94
Rural operating	4,668.63	4,087.35	2,940.71	1,067.08	
Intra-system eliminations	*4,668.63*				
Operating account—power undertakings		242,644.51	897,562.99	159,401.00	85,856.94
NON-SYSTEM PROPERTIES:					
Bonnechere River storage—Round Lake Dam		4.00	2,328.38		
Nipissing rural power district	5,581.98	3,226.63	1,360.01	984.91	
Manitoulin rural power district	3,750.00	1,216.99	1,523.98	1,147.70	
	9,331.98	4,447.62	5,212.37	2,132.61	
SUNDRY OPERATIONS:					
Service buildings and equipment		467,928.67	20,188.65	3,978.45	
Administrative office building		113,511.84	68,194.51	8,102.17	
Terminal building, Hamilton		31,879.90	30,934.41		
Inter-departmental charges		*224,752.45*			
		388,567.96	119,317.57	12,080.62	
Grand totals	4,043,078.75	6,296,217.15	12,392,977.07	2,188,204.89	776,295.61

COMMISSION OF ONTARIO

for the Year Ended October 31, 1936

Rate stabilization appropriation	Sinking fund appropriation	Total amount authorized to be charged for power (Section 56)	Amounts received from (or billed against) consumers by the Commission	Amounts remaining to be credited or charged to municipalities and rural power districts		Total operating revenues	Surplus after sinking fund and rate stabilization appropriations
				Credited	Charged		
$ c.	$ c.	$ c.	$ c.	$ c.	$ c	$ c.	$ c.
1,874.886.60	1,452,912.15	16,704,603.77	17,111,479.86	348,724.62	32,343.02	16,795,098.26	90,494.49
88,713.00	81,445.20	957,092.09	961,373.80			961,373.80	4,281.71
	488,121.14	4,956,927.94	4,850,336.37			4,850,336.37	*106,591.57*
	11,416.28	202,487.99	214,303.36			214,303.36	11,815.37
1,963,599.60	2,033,894.77	22,821,111.79	23,137,493.39	348,724.62	32,343.02	22,821,111.79	
	75,139.12	2,098,619.24	2,187,520.92	88,901.68		2,098,619.24	
		961,373.80	*961,373.80*			*961,373.80*	
1,963,599.60	2,109,033.89	23,958,357.23	24,363,640.51	437,626.30	32,343.02	23,958,357.23	
	361.05	1,808.61	1,808.61			1,808.61	
1,963,599.60	2,109,394.94	23,960,165.84	24,365,449.12	437.626.30	32,343.02	23,960,165.84	
	63,757.06	749,102.74	812,344.93	57,552.04	1,730.93	756,523.82	7,421.08
	9,970.44	117,174.63	118,260.48			118,260.48	1,085.85
	5,853.15	70,293.76	61,786.83			61,786.83	*8,506.93*
	79,580.65	936,571.13	992,392.24	57,552.04	1,730.93	936,571.13	
	10,066.12	266,944.59	263,578.21		3,366.38	266,944.59	
		118,260.48	*118,260.48*			*118,260.48*	
	89,646.77	1,085,255.24	1,137,709.97	57,552.04	5,097.31	1,085,255.24	
	50.54	290.75	290.75			290.75	
	89,697.31	1,085,545.99	1,138,000.72	57,552.04	5,097.31	1,085,545.99	
	99,654.71	1,755,827.43	2,021,138.92	167,158.51		1,853,980.41	98,152.98
	12,286.35	187,578.03	198,483.81			198,483.81	10,905.78
	50,605.26	662,001.79	566,638.50			566,638.50	*95,363.29*
	2,457.71	90,261.36	108,089.94			108,089.94	17,828.58
		17,715.05	14,785.31			14,785.31	*2,929.74*
	2,572.31	66,959.83	38,365.52			38,365.52	*28,594.31*
	167,576.34	2,780,343.49	2,947,502.00	167,158.51		2,780,343.49	
	19,654.31	492,568.29	514,902.54	22,334.25		492,568.29	
		198,483.81	*198,483.81*			*198,483.81*	
	187,230.65	3,074,427.97	3,263,920.73	189,492.76		3,074,427.97	
	94,007.29	1,028,215.84	982,135.66	31,008.92		951,126.74	*77,089.10*
	421.87	4,963.49	4,668.63			4,668.63	*294.86*
	53,740.82	492,360.95	569,744.91			569,744.91	77,383.96
	148,169.98	1,525,540.28	1,556,549.20	31,008.92		1,525,540.28	
	642.08	13,405.85	13,926.24	520.39		13,405.85	
		4,668.63	*4,668.63*			*4,668.63*	
	148,812.06	1,534,277.50	1,565,806.81	31,529.31		1,534,277.50	
	1.737.60	4,069.98	4,069.98			4,069.98	
	300.23	11,453.76	11,957.57	503.81		11,453.76	
	376.15	8,014.82	8,864.56	849.74		8,014.82	
	2,413.98	23,538.56	24,892.11	1,353.55		23,538.56	
	5,657.39	497,753.16	529,547.29			529,547.29	31,794.13
	19,125.33	208,933.85	198,648.00			198,648.00	*10,285.85*
		62,814.31	32,176.68			32,176.68	*30,637.63*
		224,752.45	*200.828.90*			*200,828.90*	23,923.55
	24,782.72	544,748.87	559,543.07			559,543.07	14,794.20
1,963,599.60	2,562,331.66	30,222,704.73	30,917,612.56	717,553.96	37,440.33	30,237,498.93	14,794.20

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Fixed Assets—October 31, 1936

NIAGARA SYSTEM

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Power Plants:						
Niagara River:						
Queenston-Chippawa	*21,704.83*	9.10		48,020.975.58	28,813,679.64	76,834,655.22
Ontario Power	42,878.51	504.55	7,281,151.42		14,793,395.06	22,074,546.48
Toronto Power			3,683,475.94	140,035.66	7,697,945.93	11,521,457.53
Ottawa River:						
Chats Falls	62,375.18			797,028.40	6,300,313.34	7,097,341.74
Welland Canal:						
DeCew Falls	*151.47*	383.04	8,178,009.83	165,785.00	3,347,565.58	11,691,360.41
Hamilton steam plant	110.00			501,721.42		501,721.42
	83,507.39	896.69	19,142,637.19	49,625,546.06	60,952,899.55	129,721,082.80
Transformer Stations:						
Southern Ontario	122,291.43	14,386.47			26,613,930.48	26,613,930.48
Eastern—Chats Falls	13,064.78	36,131.72			8,876,082.62	8,876,082.62
	135,356.21	50,518.19			35,490,013.10	35,490,013.10
Transmission Lines:						
Southern Ontario:						
Right-of-way	76,020.11			6,968,487.42		6,968,487.42
Lines	*149,545.02*	62,860.14			18,372,800.46	18,372,800.46
Eastern-Chats Falls:						
Right-of-way	5,416.47			1,638,761.57		1,638,761.57
Lines	*228.60*				7,501,389.59	7,501,389.59
	68,337.04	62,860.14		8,607,248.99	25,874,190.05	34,481.439.04
Local Systems:						
Niagara Peninsula and Dundas areas	2,927.43				246,706.41	246,706.41
Sub-total	153,453.99	114,275.02	19,142,637.19	58,232,795.05	122,563,809.11	199,939,241.35
Rural Power Districts:						
H-E.P.C. investment	452,377.71	37,044.78			7,319,088.91	7,319,088.91
Government grants	451,492.20	36,955.81			7,235,501.69	7,235,501.69
	903,869.91	74,000.59			14,554,590.60	14,554,590.60
Rural Lines:						
Welland and Milton					20,058.42	20,058.42
Lincoln Electric:						
St. Catharines System					187,467.86	187,467.86
	1,057,323.90	188,275.61	19,142,637.19	58,232,795.05	137,325,925.99	214,701,358.23

	Cost statements	Transfers for cost purposes	Fixed Assets (as above)
	$ c.	$ c.	$ c.
Cost of Power schedules	199,890,050.11	49,191.24	199,939,241.35
Rural Operating schedules	7,368,280.15	*49,191.24*	7,319,088.91
Rural Lines schedule	20,058.42		20,058.42

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Fixed Assets—October 31, 1936

GEORGIAN BAY SYSTEM

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Power Plants:						
Musquash River:						
Bala No. 1 & 2 Plants	210.00		39,929.64	1,810.00	50,650.70	92,390.34
Severn River:						
Wasdells	383.08	383.08	15,202.32		132,033.25	147,235.57
Big Chute	*885.74*	145.03	122,540.48		548,746.14	671,286.62
Beaver River:						
Eugenia	*11,473.66	5,68	*6,598.51	142,169.97	1,068,806.54	1,217,575.02
Saugeen River:						
Hanover & Maple Hill				16,000.00	29,882.55	45,882.55
Walkerton	120.00		97,721.83		115,879.03	213,600.86
Southampton			69,739.07		74,447.30	144,186.37
Muskoka River:						
South Falls	1,486.57		17,365.93		438,485.97	455,851.90
Trethewey Falls				51,475.13	305,516.82	356,991.95
Hanna Chute				36,120.82	207,624,55	243,745.37
Hollow Lake Dam				16,555.34	29,540.16	46,095.50
	12,787.57	533.79	369,097.78	264,131.26	3,001,613.01	3,634,842.05
Transformer Stations	18,105.42	2,163.93			1,172,680.10	1,172,680.10
Transmission Lines	*1,215.99*	1,622.84			2,562,165.42	2,562,165.42
Local Systems	1,781.51				85,531.32	85,531.32
Sub-total	31,458.51	4,320.56	369,097.78	264,131.26	6,821,989.85	7,455,218.89
Rural Power Districts:						
H-E.P.C. investment	132,200.12	1,712.55			1,029,136.91	1,029,136.91
Government grants	127,685.85	1,712.55			940,914.98	940,914.98
	259,885.97	3,425.10			1,970,051.89	1,970,051.89
Rural Lines:						
Brechin & Flesherton					2,807.43	2,807.43
	291,344.48	7,745.66	369,097.78	264,131.26	8,794,849.17	9,428,078.21

*Includes a book adjustment of $6,598.51 on account of Beaver River Surveys.

	Cost statements	Transfers for cost purposes	Preliminary expenditures	Fixed Assets (as above)
	$ c.	$ c.	$ c.	$ c.
Cost of Power schedules	7,567,942.20	9,868.63	*122,591.94*	7,455,218.89
Rural Operating schedules	1,039,005.54	*9,868.63*		1,029,136.91
Rural Lines schedule	2,807.43			2,807.43

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Fixed Assets—October 31, 1936

EASTERN ONTARIO SYSTEM

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Power Plants:						
Fenelon River:						
Fenelon Falls	*245.00*		60,000.00		84,729.33	144,729.33
Otonabee River:						
Auburn	334.86	334.86	31,400.00		286,875.92	318,275.92
Trent River:						
Heely Falls					1,186,844.43	1,186,844.43
Seymour	1,111.27	1,111.27			299,745.74	299,745.74
Ranney Falls	105.91				1,339,262.83	1,339,262.83
Hagues Reach	2,627.48				576,371.78	576,371.78
Meyersburg	196.94				837,060.41	837,060.41
Frankford	*45.00*				252,038.13	252,038.13
Sydney	200.77				252,103.66	252,103.66
Misc. equipment					46,504.47	46,504.47
Mississippi River:						
High Falls	1,119.08			13,113.84	685,482.88	698,596.72
Carleton Place	*1,125.00*			7,929.06	49,847.10	57,776.16
Intangibles	*41,255.67*	7.00	2,274,472.31			2,274,472.31
Galetta	52,262.91			20,000.00	128,920.09	148,920.09
Madawaska River:						
Calabogie	120.00			79,991.00	660,272.02	740,263.02
Storage Dams	3,180.58			2,555.00	16,036.40	18,591.40
	18,589.13	1,453.13	2,365,872.31	123,588.90	6,702,095.19	9,191,556.40
Transformer Stations	56,719.77	2,128.53			2,716,545.86	2,716,545.86
Transmission Lines	32,529.28	701.84		215,815.59	4,195,536.57	4,411,352.16
Local and Rural Systems	4,151.41				207,103.68	207,103.68
Miscellaneous:						
Campbellford Pulp Mill					52,559.93	52,559.93
Cobourg Gas Works	*74.85*				26,413.01	26,413.01
	74.85				78,972.94	78,972.94
Sub-total	111,914.74	4,283.50	2,365,872.31	339,404.49	13,900,254.24	16,605,531.04
Rural Power Districts:						
H-E.P.C. investment	159,746.48	11,964.64			1,920,071.87	1,920,071.87
Government grants	157,594.11	11,964.64			1,883,000.83	1,883,000.83
	317,340.59	23,929.28			3,803,072.70	3,803,072.70
	429,255.33	28,212.78	2,365,872.31	339,404.49	17,703,326.94	20,408,603.74

	Cost statements	Transfer for cost purposes	Miscellaneous investments	Preliminary expenditure	Fixed Assets (as above)
	$ c.	$ c.	$ c.	$ c.	$ c.
Cost of Power schedules	17,535,899.92	32,006.83	*6,375.00*	*956,000.71*	16,605,531.04
Rural Operating schedules	1,952,078.70	*32,006.83*			1,920,071.87

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Fixed Assets—October 31, 1936

THUNDER BAY SYSTEM

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
Power Plants:	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Nipigon River:						
Cameron Falls	*3,970.27*	202.22		241,874.12	8,777,538.79	9,019,412.91
Alexander	896.68	482.52		76,898.44	5,375,547.29	5,452,445.73
Virgin Falls Dam				55,450.41	426,736.74	482,187.15
Deficit 1921-23			620,818.33			620,818.33
	3,073.59	684.74	620,818.33	374,222.97	14,579,822.82	15,574,864.12
Transformer Stations	16,967.23	721.26			1,028,817.30	1,028,817.30
Transmission Lines	134,559.79	133,872.91		213,193.71	1,704,997.42	1,918,191.13
Sub-total	148,453.43	135,278.91	620,818.33	587,416.68	17,313,637.54	18,521,872.55
Rural Power Districts:						
H-E.P.C. investment	2,015.67	174.63			62,217.31	62,217.31
Government grants	2,015.67	174.64			62,217.30	62,217.30
	4,031.34	349.27			124,434.61	124,434.61
	152,484.77	135,628.18	620,818.33	587,416.68	17,438,072.15	18,646,307.16

	Cost statements	Preliminary expenditures	Fixed assets (as above)
	$ c.	$ c.	$ c.
Cost of Power schedules	18,622,680.38	*100,807.83*	18,521,872.55
Rural Operating schedule	62,217.31		62,217.31

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO SERVICE AND ADMINISTRATIVE BUILDINGS AND EQUIPMENT

Fixed Assets—October 31, 1936

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
Administrative Buildings:	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Toronto:						
University Avenue	10,739.62			195,837.00	1,459,611.42	1,655,448.42
Elm and Centre Streets					160,821.95	160,821.95
	10,739.62			195,837.00	1,620,433.37	1,816,270.37
Service Buildings and Equipment:						
Toronto	6,143.37				516,254.78	516,254.78
Cobourg					21,629.08	21,629.08
Hamilton				441,439.88	308,560.12	750,000.00
	6,143.37			441,439.88	846,443.98	1,287,883.86
	16,882.99			637,276.88	2,466,877.35	3,104,154.23

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Fixed Assets—October 31, 1936

NON-SYSTEM PROPERTIES

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Bonnechere River Storage:						
Round Lake Dam					23,185.58	23,185.58
Deficit 1917-31			28,556.30			28,556.30
			28,556.30		23,185.58	51,741.88
Nipissing Rural Power District:						
H-E.P.C. investment	3,233.80	294.08			30,245.12	30,245.12
Government grants	3,233.80	294.07			29,501.39	29,501.39
	6,467.60	588.15			59,746.51	59,746.51
Manitoulin Rural Power District:						
Transformer Station					5,098.11	5,098.11
Transmission lines	406.45				30,624.08	30,624.08
	406.45				35,722.19	35,722.19
Government grants	406.44				29,860.88	29,860.88
	812.89				65,583.07	65,583.07
	7,280.49	588.15	28,556.30		148,515.16	177,071.46

SUMMARY

	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Niagara System	1,057,323.90	188,275.61	19,142,637.19	58,232,795.05	137,325,925.99	214,701,358.23
Georgian Bay System	291,344.48	7,745.66	369,097.78	264,131.26	8,794,849.17	9,428,078.21
Eastern Ontario System	429,255.33	28,212.78	2,365,872.31	339,404.49	17,703,326.94	20,408,603.74
Thunder Bay System	152,484.77	135,628.18	620,818.33	587,416.68	17,438,072.15	18,646,307.16
Non-system Properties	7,280.49	588.15	28,556.30		148,515.16	177,071.46
Service and administrative buildings and equipment	16,882.99			637,276.88	2,466,877.35	3,104,154.23
	1,954,571.96	360,450.38	22,526,981.91	60,061,024.36	183,877,566.76	266,465,573.03

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

CAPITAL EXPENDITURES AND GRANTS—RURAL POWER DISTRICTS

Summary at October 31, 1936

Statement showing the extents to which Grants stand authorized by Orders-in-Council under the Rural Hydro-Electric Distribution Act, and the amounts of such Grants paid over by the Province to the Commission under such authorization up to October 31, 1936; also the total Capital Expenditures on the construction of Primary and Secondary Lines in Rural Power Districts and the amounts of the Grants (fifty percent. of both Primary and Secondary Lines) claimed from the Province of Ontario up to October 31, 1936.

System	Grants authorized by Orders-in-Council	Amounts paid by Province under such authorizations	Total capital expenditures on Rural Power Districts	*Grants claimed from the Province (50% of primary and secondary lines)
	$ c.	$ c.	$ c.	$ c.
Niagara System	8,557,958.94	7,272,457.50	14,628,591.19	7,272,457.50
Georgian Bay System	1,134,882.49	942,465.56	1,973,476.99	942,627.53
Eastern Ontario System	2,237,222.65	1,894,965.47	3,827,001.98	1,894,965.47
Thunder Bay System	79,611.00	62,391.94	124,783.88	62,391.94
Non-System Properties:				
Nipissing District	33,031.50	29,795.46	60,334,66	29,795.46
Manitoulin District	32,769.00	29,860.88	60,484.96	29,860.88
Totals	12,075,475.58	10,231,936.81	20,674,673.66	10,232,098.78
Additional sum authorized by above Orders-in-Council and paid over to the Commission but not allocated as between rural power districts		13,171.29		
	12,075,475.58	10,245,108.10	20,674,673.66	10,232,098.78

*Grants not made by Province in respect of a summer resort, street lighting systems in 66 districts, service buildings in 2 districts and amounts paid for business already established (hereinafter called Intangible Assets) in 9 rural distribution systems purchased from private companies.

NOTE:—

The amount of cash paid over by the Province to the Commission up to October 31, 1936, on account of authorized grants to rural power districts—as above set out—amounts to	$10,245,108.10	
The Grants claimed from the Province—as above set out—in respect of rural power districts as at October 31, 1936, amount in the aggregate to	10,232,098.78	
A balance of		$13,009.32
Which balance represents:		
(a) Grant funds in the hands of the Commission at October 31, 1936, not allocated but to apply against the construction of authorized rural power districts and extension to existing districts	$13,171.29	
Less:		
(b) Grants (or balance thereof) payable by the Province to the Commission in respect of Medonte rural power district (Georgian Bay System)	161.97	
		$13,009.32

THE HYDRO-ELECTRIC POWER

Power Accounts Receivable

System or Property	Wholesale power consumers			
	Interim power bills	Accumulated amount standing as a charge or credit on October 31, 1936		Net total for wholesale consumers
		Charge	Credit	
	$ c.	$ c.	$ c.	$ c.
NIAGARA SYSTEM:				
Municipalities	1,680,024.96	46,021.62	348,020.18	1,378,026.40
Companies	1,170,385.13	....	....	1,170,385.13
Local and rural	....	....	....	....
Lincoln Electric	....	....	....	....
	2,850,410.09	46,021.62	348,020.18	2,548,411.53
GEORGIAN BAY SYSTEM:				
Municipalities	91,180.14	1,595.48	61,769.03	31,006.59
Companies	3,370.06	....	....	3,370.06
Local and rural	....	....	....	....
	94,550.20	1,595.48	61,769.03	34,376.65
EASTERN ONTARIO SYSTEM:				
Municipalities	230,020.95	....	171,458.44	58,562.51
Companies	40,528.00	....	....	40,528.00
Rural	....	....	....	....
Local	....	....	....	....
	270,548.95	....	171,458.44	99,090.51
THUNDER BAY SYSTEM:				
Municipalities	98,774.86	....	31,052.90	67,721.96
Companies	50,007.82	....	....	50,007.82
Rural	....	....	....	....
	148,782.68	....	31,052.90	117,729.78
NON-SYSTEM PROPERTIES:				
Nipissing rural	....	....	....	....
Manitoulin rural	....	....	....	....
	....	....	....	....
Grand totals	3,364,291.92	47,617.10	612,300.55	2,799,608.47

COMMISSION OF ONTARIO

—October 31, 1936

Retail power consumers—Local and rural districts	Net total of power accounts receivable	Balance sheet figures		Debit balances three months or more overdue
		Debit balances	Credit balances	
$ c.	$ c.	$ c.	$ c.	$ c.
....	1,378,026.40	1,385,364.12	7,337.72	875.21
....	1,170,385.13	1,170,598.86	213.73	762,471.39*
469,944.81	469,944.81	469,944.81	....	50,662.03
5,961.48	5,961.48	5,961.48	....	42.40
475,906.29	3,024,317.82	3,031,869.27	7,551.45	814,051.03
....	31,006.59	37,594.74	6,588.15	216.06
....	3,370.06	3,370.06	....	....
77,651.24	77,651.24	77,651.24	....	6,874.37
77,651.24	112,027.89	118,616.04	6,588.15	7,090.43
....	58,562.51	71,961.86	13,399.35	....
....	40,528.00	40,528.00	....	....
139,278.41	139,278.41	139,278.41	....	12,730.80
9,612.79	9,612.79	9,612.79	....	174.66
148,891.20	247,981.71	261,381.06	13,399.35	12,905.46
....	67,721.96	67,721.96	....	....
....	50,007.82	50,007.82	....	....
3,598.17	3,598.17	3,598.17	....	1,019.77
3,598.17	121,327.95	121,327.95	....	1,019.77
2,176.30	2,176.30	2,176.30	....	78.85
3,426.77	3,426.77	3,426.77	....	71.22
5,603.07	5,603.07	5,603.07	....	150.07
711,649.97	3,511,258.44	3,538,797.39	27,538.95	835,216.76

*Items included in the amount of $762,471.39—Niagara System, Companies, overdue accounts—presently under settlement negotiations:

Department of Railways and Canals, Ottawa	$500,067.05
Maple Leaf Milling Company Limited	190,336.07
Canadian Aggregates Limited	72,068.27
	$762,471.39

THE HYDRO-ELECTRIC POWER
Funded Debt Issued or

Description	Application of proceeds
NIAGARA SYSTEM:	
4½% H-E.P.C. debentures	Refunding Toronto Power Co.
5% “ “	Refunding Toronto Power Co.
6% “ “	Toronto Power Co.
6% “ “	T. & Y. R.R. Equipment
2½% “ “	Refunding Gov'r. Advs., R.R., etc.
6% “ “	Refunding Ontario Power Co.
3½% “ “	Refunding D. P. & T. and E. D. Co.'s.
5% Ontario Power Co. bonds	Ontario Power Co.
2½% H-E.P.C. debentures	Refunding Gov't. Advs., T.T., etc.
5% Ontario Transmission Co. bonds	Ontario Transmission Co.
4% H-E.P.C. debentures	Ontario Power Co.
4% “ “	Essex System
4% “ “	Thorold System
4¾% “ “	Dom. Power & Trans. Co.
Municipal debentures assumed	Rural Lines
GEORGIAN BAY SYSTEM:	
Gravenhurst debentures assumed	Muskoka Power
Brock Twp. “ “	Rural Lines
EASTERN ONTARIO SYSTEM:	
Municipal debentures assumed	Rural Lines
RADIAL RAILWAYS:	
6% H-E. Railway bonds	T. & Y. Radial
Funded Debt as shown on the Balance Sheet of The Hydro-Electric Power Commission of Ontario	
NORTHERN ONTARIO PROPERTIES:	
3½%/4/5% H-E.P.C. debentures	Ontario Power Service Corp.
2½% “ “	Abitibi and St. Joseph Districts
GUELPH RADIAL RAILWAY:	
5% H.E. Railway bonds	Extensions and Betterments
Funded Debt relating to all properties vested in, or operated by the Commission	
HYDRO-RADIAL DEBENTURES ASSUMED BY S. W. & A. RLY. CO. AND THE PROVINCE OF ONTARIO:	
5% H-E. Railway bonds	Essex County Rly.
5% “ “ “	“ “ “
5% “ “ “	“ “ “
5% “ “ “	“ “ “
4½% “ “ “	“ “ “
6% “ “ “	“ “ “
Total funded debt in the hands of the public	
TREASURY SECURITIES PLEDGED WITH THE BANK OF MONTREAL:	
5% H-E. Railway bonds	Pt. C. & St. C. Radial
Total funded debt issued or assumed	

COMMISSION OF ONTARIO

Assumed—October 31, 1936

Date of issue	Date of maturity	Principal outstanding October 31, 1936	Interest for the year 1935-36	Interest accrued October 31, 1936
		$ c.	$ c.	$ c.
February 1, 1933	February 1, 1938	9,000,000.00	405,000.00	101,250.00
June 16, 1924	June 15, 1939	4,000,000.00	200,000.00	75,000.00
December 1, 1920	December 1, 1940	413,200.00	24,792.00	10,330.00
December 1, 1920	December 1, 1940	205,800.00	12,348.00	5,145.00
March 1, 1936	March 1, 1941	10,000,000.00*	166,666.67*	41,666.67*
June 24, 1921	June 24, 1941	3,200,000.00	192,000.00	67,857.53
January 1, 1935	January 1, 1943	10,000,000.00	350,000.00	116,666.66
February 1, 1903	February 1, 1943	7,679,000.00	383,954.76	95,987.50
June 15, 1936	June 15, 1944	10,000,000.00*	93,750.00*	93,750.00*
May 1, 1905	May 1, 1945	1,201,000.00	60,752.78	....
August 1, 1917	August 1, 1957	8,000,000.00	320,000.00	80,000.00
June 1, 1918	June 1, 1958	200,000.00	8,000.00	3,333.34
December 1, 1918	December 1, 1958	100,000.00	4,000.00	1,666.67
January 1, 1930	January 1, 1970	13,000,000.00	617,500.00	205,833.33
		76,999,000.00	2,838,764.21	898,486.70
Various	Various	10,989.14	950.87	156.01
		77,009,989.14	2,839,715.08	898,642.71
Various	Various	7,433.05	844.82	304.47
Various	Various	587.00	41.42	1.77
		8,020.05	886.24	306.24
Various	Various	4,078.31	260.18	188.05
December 1, 1920	December 1, 1940	2,375,000.00	142,500.00	59,375.00
....	....	79,397,087.50	2,983,361.50	958,512.00
October 1, 1932	October 1, 1952	17,626,950.00	616,943.25	51,411.94
March 1, 1936	March 1, 1941	5,000,000.00	83,333.33	20,833.33
		22,626,950.00	700,276.58	72,245.27
May 1, 1931	November 1, 1970	300,000.00	15,000.00	....
....	....	102,324,037.50	3,698,638.08	1,030,757.27
September 1, 1923	September 1, 1943	966,205.00	....	....
July 1, 1925	July 1, 1945	750,000.00	....	....
September 1, 1925	September 1, 1945	100,000.00	....	....
July 15, 1926	July 15, 1946	1,000,000.00	....	....
April 1, 1920	April 1, 1960	2,100,000.00	....	....
July 1, 1921	July 1, 1961	900,000.00	....	....
		5,816,205.00	....	....
....	....	108,140,242.50	3,698,638.08	1,030,757.27
November 1, 1919	November 1, 1969	1,200,000.00	....	....
		109,340,242.50	3,698,638.08	1,030,757.27

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*These H-E.P.C. debentures do not wholly apply to the Niagara system because the Government advances R.R. & T.T., which they refunded, applied to all systems. Allocation to systems is to be made during the year 1936-37.

THE HYDRO-ELECTRIC POWER

Provision for Depreciation and

	Niagara System	Georgian Bay System
	$ c.	$ c.
Balances at November 1, 1935	23,278,963.13	1,763,664.31
Depreciation and obsolescence provisions for the year:		
Principal—as per cost statement	1,631,383.24	131,661.80
Interest at 4% on reserves' balances	931,158.53	70,546.58
Total provision	2,562,541.77	202,208.38
Adjustments re transfers of equipment	....	....
Sub-total	25,841,504.90	1,965,872.69
Expenditures for the year	286,020.14	19,424.45
Balances at October 31, 1936	25,555,484.76	1,946,448.24
Account balances:		
Power plants, transmission lines and transformer stations	22,874,057.91	1,704,282.10
Rural power districts	2,676,217.51	241,409.13
Rural lines	5,209.34	757.01
Nipissing rural power districts	....	....
Manitoulin rural power district	....	....
Administrative office building	....	....
Service buildings and equipment	....	....
	25,555,484.76	1,946,448.24

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*In previous years known as Renewals Reserves.

COMMISSION OF ONTARIO

Obsolescence*—October 31, 1936

Eastern Ontario System	Thunder Bay System	Non-system properties	Service and administrative buildings and equipment	Total for power undertakings operated on a "cost basis"
$ c.	$ c.	$ c.	$ c.	$ c.
3,850,477.24	1,763,831.49	9,580.73	468,019.04	31,134,535.94
251,545.62	159,401.00	2,132.61	12,080.62	2,188,204.89
154,259.70	70,553.26	383.23	15,615.21	1,242,516.51
405,805.32	229,954.26	2,515.84	27,695.83	3,430,721.40
6,969.31	....	....	*180.22*	6,789.09
4,263,251.87	1,993,785.75	12,096.57	495,534.65	34,572,046.43
32,376.57	1,058.24	....	919.90	339,799.30
4,230,875.30	1,992,727.51	12,096.57	494,614.75	34,232,247.13
3,730,976.84	1,980,623.76	....	....	30,289,940.61
499,898.46	12,103.75	....	....	3,429,628.85
....	....	....	....	5,966.35
....	....	7,151.01	....	7,151.01
....	....	4,945.56	....	4,945.56
....	....	....	144,014.97	144,014.97
....	....	....	350,599.78	350,599.78
4,230,875.30	1,992,727.51	12,096.57	494,614.75	34,232,247.13

THE HYDRO-ELECTRIC POWER

Contingency Reserves

	Niagara System	Georgian Bay System
	$ c.	$ c.
Balances at November 1, 1935	3,780,570.79	493,873.22
Contingencies provisions for the year:		
Principal—as per cost statement	604,475.08	28,079.05
Interest at 4% on reserves' balances	151,222.83	19,754.93
Total provision	755,697.91	47,833.98
Profits from sale of securities	136,833.46	11,413.86
Adjustment in book value of the capital stock of the Hamilton Street Railway Company, being changes in surplus account since acquisition	7,208.78	....
Surplus after sinking fund and rate stabilization appropriations	....	....
Sub-total	4,680,310.94	553,121.06
Contingencies met with during the year	263,956.79	15,232.30
Hamilton Street Railway Company:		
Unearned interest on Commission's investment in capital stock	123,737.66	....
Deficit for the year	25,833.52	....
	149,571.18	....
Amount provided for Stores Obsolescence	....	....
Deficit—Terminal Building, Hamilton	30,637.63	....
Total charges	444,165.60	15,232.30
Balances at October 31, 1936	4,236,145.34	537,888.76
Account balances:		
Power plants, transmission lines, transformer stations and rural power districts	4,233,462.69	537,551.02
Rural lines	2,682.65	337.74
Nipissing rural power districts	....	....
Manitoulin rural power district	....	....
	4,236,145.34	537,888.76

COMMISSION OF ONTARIO

—October 31, 1936

Eastern Ontario System	Thunder Bay System	Non-system properties	Service and administrative buildings and equipment	Total for power undertakings operated on a "cost basis"
$ c.	$ c.	$ c.	$ c.	$ c.
1,298,240.13	746,529.49	4,064.76	....	6,323,278.39
57,884.54	85,856.94	....	....	776,295.61
51,929.61	29,861.18	162.59	....	252,931.14
109,814.15	115,718.12	162.59	....	1,029,226.75
26,042.56	12,697.57	....	....	186,987.45
....	....	....	....	7,208.78
....	....	....	14,794.20	14,794.20
1,434,096.84	874,945.18	4,227.35	14,794.20	7,561,495.57
23,951.03	3,749.76	....	....	306,889.88
....	....	....	....	123,737.66
....	....	....	....	25,833.52
....	....	....	....	149,571.18
....	....	....	45,431.83	45,431.83
....	....	....	*30,637.63*	....
23,951.03	3,749.76	....	14,794.20	501,892.89
1,410,145.81	871,195.42	4,227.35	....	7,059,602.68
1,410,145.81	871,195.42	....	....	7,052,354.94
....	....	....	....	3,020.39
....	....	2,361.93	....	2,361.93
....	....	1,865.42	....	1,865.42
1,410,145.81	871,195.42	4,227.35	....	7,059,602.68

THE HYDRO-ELECTRIC POWER

Sinking Fund Reserves—

	Niagara System	Georgian Bay System
	$ c.	$ c.
Balances at November 1, 1935	30,626,386.79	1,191,718.14
Adjustments—prior years	2.91	....
	30,626,383.88	1,191,718.14
Sinking fund appropriations for the year:		
Principal—as per cost statement	2,109,394.94	89,697.31
Interest at 4% on reserves' balances	1,225,055.36	47,668.72
Total appropriation	3,334,450.30	137,366.03
Balances at October 31, 1936	33,960,834.18	1,329,084.17
Account balances:		
Systems	33,250,196.51	1,260,146.88
Rural power districts	697,325.02	67,827.43
Rural lines	13,312.65	1,109.86
Bonnechere River storage system	....	....
Nipissing rural power districts	....	....
Manitoulin rural power district	....	....
Administrative office buildings	....	....
Service buildings and equipment	....	....
	33,960,834.18	1,329,084.17

COMMISSION OF ONTARIO

—October 31, 1936

Eastern Ontario System	Thunder Bay System	Non-system properties	Service and administrative buildings and equipment	Totals for power undertakings operated on a "cost basis"
$ c.	$ c.	$ c.	$ c.	$ c.
1,514,404.40	1,450,350.77	9,657.71	329,236.66	35,121,754.47
....	....	....	....	2.91
1,514,404.40	1,450,350.77	9,657.71	329,236.66	35,121,751.56
187,230.65	148,812.06	2,413.98	24,782.72	2,562,331.66
60,576.18	58,014.03	386.31	13,169.47	1,404,870.07
247,806.83	206,826.09	2,800.29	37,952.19	3,967,201.73
1,762,211.23	1,657,176.86	12,458.00	367,188.85	39,088,953.29
1,628,599.28	1,654,637.23	....	......	37,793,579.90
133,611.95	2,539.63	....	......	901,304.03
....	....	....	......	14,422.51
....	....	9,405.55	......	9,405.55
...	.....	1,574.43	......	1,574.43
...	......	1,478.02	...	1,478.02
...	.....	....	214,256.57	214,256.57
...		....	152,932.28	152,932.28
1,762,211.23	1,657,176.86	12,458.00	367,188.85	39,088,953.29

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO
Account with
The Provincial Treasurer of the Province of Ontario
For the Two Years Ended October 31, 1936
ADVANCES FROM THE PROVINCE OF ONTARIO

	Total	Northern Ontario Properties operated for the Province of Ontario	Niagara and other systems operated on a "Cost Basis"
ADVANCES FOR CAPITAL EXPENDITURES:	$ c.	$ c.	$ c.
Cash advances made by the Province to the Commission for capital expenditure purposes during the years 1909 to 1934 inclusive	207,250,258.34	8,272,889.39	198,977,368.95
Cash returned by the Commission to the Province on April 30, 1935, to cover the difference between advances made by the Province to the Commission during the year ended October 31, 1934, and the capital expenditures made out of such advances by the Commission in that year	247,507.98	74,001.99	173,505.99
Total advances for capital expenditures	207,002,750.36	8,198,887.40	198,803,862.96
REPAYMENTS OF ADVANCES—1926-33:			
Cash repayments made by the Commission to the Province during the years 1926 to 1933 inclusive, which have been applied in each subsequent year to reduce the Commission's share in maturing Provincial obligations	17,008,616.73	....	17,008,616.73
COMMISSION'S SHARE IN PROVINCIAL BONDS AT OCT. 31, 1934	189,994,133.63	8,198,887.40	181,795,246.23
TRANSFERS TO REPAYMENT ACCOUNT (as shown below):			
Commission's share in Provincial Bonds maturing in 1934-35	3,946,628.69	498,062.05	3,448,566.64
Commission's share in Provincial Bonds maturing in 1935-36	21,998,092.45	532,771.72	21,465,320.73
Total share in maturing Provincial Bonds, 1934-36	25,944,721.14	1,030,833.77	24,913,887.37
COMMISSION'S SHARE IN PROVINCIAL BONDS AT OCT. 31, 1936	164,049,412.49	7,168,053.63	156,881,358.86
REPAYMENT ACCOUNT			
REPAYMENTS OF ADVANCES—1934-36:			
Cash repayments made by the Commission to the Province as follows:—			
October 31, 1934	2,412,398.33	....	2,412,398.33
October 31, 1935	2,410,683.65	335,264.83	2,075,418.82
During the year ended October 31, 1936	22,813,942.30	390,855.93	22,423,086.37
Total repayments, 1934-36	27,637,024.28	726,120.76	26,910,903.52
TRANSFERS FROM PROVINCIAL ADVANCE ACCOUNT (as above):			
Commission's share in Provincial Bonds maturing in 1934-35	3,946,628.69	498,062.05	3,448,566.64
Commission's share in Provincial Bonds maturing in 1935-36	21,998,092.45	532,771.72	21,465,320.73
Total share in maturing Provincial Bonds, 1934-36	25,944,721.14	1,030,833.77	24,913,887.37
CASH ON DEPOSIT WITH THE PROVINCE AT OCTOBER 31, 1936	1,692,303.14	*304,713.01*	1,997,016.15

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

DETAILED STATEMENTS

FOR MUNICIPALITIES AND RURAL POWER DISTRICTS

For the Year ended October 31, 1936

Cost of Power	Charges to Municipalities and Rural Power Districts
Rural Operating	Charges to Rural Power Districts
Credit or Charge	Accumulated Balances of Municipalities and Rural Power Districts on account of Annual Cost Adjustments
Sinking Fund	Equities of Municipalities and Rural Power Districts

NIAGARA

**Statement showing the amount chargeable (upon annual adjustment) to each
it by the Commission; the amount received by the Commission
or charged to each Municipality in respect of power**

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
	To Jan. 1, 1936	To Oct. 31 1936			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Acton	33.00	32.00	289,417.44	1,075.4	3,743.93	5,937.21	13,992.63
Agincourt	40.00	40.00	48,880.51	150.3	523.26	1,115.60	2,377.53
Ailsa Craig	52.00	51.00	35,779.75	94.3	328.30	1,244.36	1,739.95
Alvinston	82.00	75.00	48,951.74	81.2	282.69	1,667.31	2,382.68
Amherstburg	38.00	38.00	191,187.95	652.5	2,271.63	4,180.01	9,304.55
Ancaster twp.	32.00	32.00	62,183.82	246.9	859.57	1,741.67	3,024.70
Arkona	75.00	72.00	28,127.39	47.8	166.41	1,056.13	1,368.42
Aylmer	36.00	35.00	136,176.44	497.3	1,731.32	3,320.70	6,617.67
Ayr	35.00	34.00	45,121.25	172.0	598.81	1,187.41	2,195.93
Baden	33.00	33.00	81,834.52	314.0	1,093.17	2,040.44	3,981.92
Beachville	33.00	33.00	104,176.21	402.4	1,400.93	2,743.03	5,072.46
Belle River	40.00	40.00	40,160.69	134.8	469.30	1,208.59	1,954.16
Blenheim	39.00	39.00	109,778.77	371.3	1,292.66	3,316.12	5,340.42
Blyth	56.00	54.00	37,160.33	87.2	303.58	995.13	1,808.11
Bolton	44.00	43.00	41,378.81	126.2	439.36	1,160.00	2,014.88
Bothwell	47.00	47.00	33,558.22	103.9	361.72	1,644.47	1,632.52
Brampton	31.50	31.50	527,029.23	2,225.9	7,749.32	14,602.99	25,519.30
Brantford	27.00	27.00	3,175,127.75	13,835.1	48,165.96	63,808.67	154,503.13
Brantford twp.	32.00	32.00	137,421.13	599.3	2,086.42	4,858.38	6,688.16
Bridgeport	36.00	36.00	33,739.23	117.6	409.42	695.32	1,641.67
Brigden	65.00	65.00	30,775.49	62.0	215.85	1,093.73	1,498.47
Brussels	52.00	50.00	46,910.89	118.1	411.16	1,246.20	2,275.06
Burford	35.00	35.00	41,711.26	149.5	520.47	1,077.51	2,029.93
Burgessville	60.00	55.00	13,623.80	32.7	113.84	498.32	662.77
Caledonia	32.00	32.00	71,073.75	288.0	1,002.65	1,518.52	3,458.16
Campbellville	60.00	60.00	12,389.10	26.9	93.65	431.32	601.29
Cayuga	52.00	48.00	41,752.62	103.5	360.33	1,107.51	2,033.83
Chatham	31.00	31.00	1,091,153.92	4,430.3	15,423.79	26,188.94	53,077.72
Chippawa	25.00	25.00	48,753.05	255.0	887.77	1,244.59	2,371.41
Clifford	60.00	56.00	31,888.67	69.9	243.35	807.08	1,548.87
Clinton	39.00	38.00	134,528.96	444.9	1,548.89	3,085.47	6,545.91
Comber	50.00	46.00	47,291.85	128.7	448.06	1,345.15	2,300.59
Cottam	46.00	45.00	20,336.48	58.5	203.66	576.01	989.65
Courtright	72.00	70.00	19,711.89	33.2	115.58	735.22	959.01
Dashwood	53.00	50.00	27,581.24	72.9	253.80	719.66	1,341.71
Delaware	40.00	40.00	10,649.35	41.3	143.78	447.22	517.73
Dorchester	43.00	42.00	25,804.98	82.4	286.87	731.34	1,256.50
Drayton	58.00	56.00	42,953.74	93.9	326.91	1,106.63	2,090.47
Dresden	44.00	44.00	94,546.89	285.0	992.21	3,094.38	4,599.35
Drumbo	44.00	41.00	19,077.53	61.6	214.46	631.55	929.58

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,446.08	935.80	3,226.20	2,916.19	155.72	33,353.76	34,603.24	1,249.48
440.34	144.53	450.90	498.88	21.76	5,572.80	6,009.97	437.17
371.62	111.71	282.90	366.74	13.65	4,459.23	4,825.12	365.89
588.61	149.72	243.60	507.20	11.76	5,833.57	6,187.28	353.71
1,681.57	633.76	1,957.50	1,945.69	94.49	22,069.20	24,794.32	2,725.12
506.12	196.92	740.70	628.87	35.75	7,734.30	7,900.75	166.45
335.96	87.60	143.40	291.18	6.92	3,456.02	3,466.07	10.05
1,171.17	433.85	1,491.90	1,380.37	72.00	16,218.98	17,502.18	1,283.20
377.82	145.03	516.00	457.31	24.91	5,503.22	5,877.13	373.91
679.66	266.10	942.00	829.04	45.46	9,877.79	10,363.55	485.76
862.26	349.02	1,207.20	1,055.84	58.27	12,749.01	13,278.62	529.61
357.25	133.09	404.40	408.88	19.51	4,955.18	5,389.95	434.77
983.79	363.76	1,113.90	1,117.08	53.76	13,581.49	14,479.33	897.84
403.51	116.93	261.60	382.23	12.62	4,283.71	4,737.96	454.25
398.49	125.03	378.60	422.91	18.27	4,957.54	5,452.23	494.69
317.87	112.02	311.70	342.49	15.04	4,737.83	4,882.48	144.65
3,978.69	1,599.62	6,677.70	5,290.85	322.31	65,740.78	70,114.40	4,373.62
24,088.98	10,199.52	30,242.40	32,022.14	1,459.70	364,490.50	364,687.49	196.99
1,019.55	433.45	1,797.90	1,384.97	86.78	18,355.61	19,175.97	820.36
300.91	109.42	352.80	343.03	17.02	3,869.59	4,232.13	362.54
350.52	100.07	186.00	317.84	8.98	3,771.46	4,031.61	260.15
492.92	149.29	354.30	480.07	17.10	5,426.10	5,944.97	518.87
365.79	139.01	448.50	423.73	21.64	5,026.58	5,230.69	204.11
147.33	42.65	98.10	140.03	4.74	1,707.78	1,826.13	118.35
568.78	228.13	864.00	718.39	41.80	8,400.43	9,215.72	815.29
138.38	36.98	80.70	127.33	3.89	1,513.54	1,613.50	99.96
448.29	127.56	310.50	429.38	14.99	4,832.39	5,037.99	205.60
8,457.02	3,536.40	13,290.90	11,025.27	641.51	131,641.55	137,340.57	5,699.02
304.41	141.02	765.00	486.64	36.92	6,237.76	6,374.33	136.57
354.12	99.48	209.70	327.93	10.12	3,600.65	3,966.44	365.79
1,232.74	418.74	1,334.70	1,370.31	64.43	15,601.19	16,479.63	878.44
479.58	150.52	386.10	484.49	18.63	5,613.12	6,003.93	390.81
198.68	66.47	175.50	208.08	8.47	2,426.52	2,642.38	215.86
235.98	58.57	99.60	204.09	4.81	2,412.86	2,338.98	(73.88)
286.25	86.85	218.70	282.77	10.55	3,200.29	3,683.79	483.50
87.45	34.13	123.90	107.74	5.98	1,467.93	1,652.30	184.37
243.38	83.07	247.20	263.34	11.94	3,123.64	3,477.97	354.33
478.75	131.65	281.70	442.64	13.60	4,872.35	5,288.48	416.13
909.33	309.42	855.00	965.69	41.27	11,766.65	12,541.28	774.63
179.44	61.78	184.80	194.76	8.91	2,405.28	2,558.75	153.47

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horsepower supplied in year after correction for power factor	Share of operating		
	To Jan. 1, 1936	To Oct. 31 1936			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Dublin	59.00	59.00	16,772.28	35.9	124.98	576.28	816.07
Dundas	27.00	27.00	343,943.59	1,578.9	5,496.80	6,117.93	16,729.29
Dunnville	32.00	32.00	223,855.69	863.1	3,004.82	5,116.48	10,891.04
Dutton	38.00	38.00	59,120.46	212.4	739.46	1,891.26	2,873.81
Elmira	36.00	36.00	182,238.19	643.8	2,241.35	3,219.16	8,867.30
Elora	36.00	36.00	81,360.84	277.0	964.36	2,093.55	3,936.69
Embro	46.00	47.00	32,380.91	97.9	340.83	1,009.94	1,576.40
Erieau	56.00	54.00	28,036.32	68.8	239.52	829.24	1,363.92
Erie Beach	70.00	65.00	7,080.17	15.4	53.61	283.34	344.42
Essex	36.00	36.00	118,907.07	407.9	1,420.08	2,763.73	5,786.76
Etobicoke twp	28.00	28.00	920,171.16	4,001.5	13,930.95	17,736.02	44,759.50
Exeter	40.00	39.00	123,174.63	401.0	1,396.05	3,133.72	6,008.24
Fergus	36.00	36.00	274,093.01	971.1	3,380.82	5,791.11	13,259.10
Fonthill	34.00	34.00	28,149.04	120.2	418.47	1,089.26	1,387.12
Forest	48.00	46.00	122,629.17	340.2	1,184.38	4,078.10	5,966.05
Galt	27.00	27.00	1,398,757.83	6,144.0	21,389.92	30,314.03	68,053.90
Georgetown	36.00	36.00	328,567.01	1,119.0	3,895.72	7,100.95	15,890.29
Glencoe	58.00	56.00	77,798.35	182.3	634.67	2,488.86	3,784.80
Goderich	43.00	43.00	346,741.95	1,015.2	3,534.35	8,002.58	16,871.61
Granton	56.00	53.00	22,400.86	61.3	213.41	780.71	1,096.90
Guelph	28.00	28.00	1,933,202.51	8,568.6	29,831.00	40,220.19	94,059.79
Hagersville	33.00	33.00	161,552.62	570.1	1,984.76	3,029.34	7,860.46
Hamilton	24.50	24.50	19,576,073.26	94,791.5	330,010.10	335,416.77	952,160.48
Harriston	44.00	43.00	101,138.73	302.1	1,051.74	2,781.12	4,922.80
Harrow	39.00	39.00	116,140.95	381.8	1,329.21	2,847.42	5,652.49
Hensall	52.00	50.00	59,947.74	146.2	508.99	1,320.50	2,922.26
Hespeler	29.00	29.00	426,227.24	1,861.3	6,479.98	9,406.03	20,737.17
Highgate	47.00	47.00	23,405.19	65.4	227.69	739.54	1,137.16
Humberstone	29.00	29.00	88,513.10	377.9	1,315.63	1,774.69	4,305.56
Ingersoll	30.00	29.00	499,358.27	2,057.9	7,164.44	12,173.25	24,332.91
Jarvis	42.00	40.00	57,486.15	164.1	571.30	1,344.27	2,779.82
Kingsville	39.00	39.00	143,314.88	464.8	1,618.17	3,496.21	6,974.62
Kitchener	27.00	27.00	3,881,394.11	17,144.0	59,685.68	75,896.49	188,864.52
Lambeth	42.00	42.00	30,260.91	98.0	341.18	1,209.34	1,471.41
LaSalle	37.00	37.00	55,599.22	192.9	671.57	1,492.76	2,705.02
Leamington	38.00	38.00	395,644.12	1,288.3	4,485.13	9,516.91	19,194.78
Listowel	37.00	37.00	258,793.37	915.5	3,187.25	7,272.41	12,592.90
London	27.00	27.00	6,979,604.20	31,590.5	109,980.19	127,392.58	339,481.89
London Rly. Com'n	......	......	278,863.48	978.8	3,407.63	8,959.80	13,555.65
London twp	34.00	34.00	104,353.73	408.5	1,422.17	2,471.96	5,076.05

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$
188.23	61.22	107.70	172.87	5.19	2,052.54	2,118.55	66.01
2,430.91	1,055.00	4,736.70	3,455.95	228.63	40,251.21	42,630.59	2,379.38
1,907.34	782.75	2,589.30	2,267.08	124.97	26,683.78	27,618.20	934.42
514.82	189.29	637.20	599.81	30.76	7,476.41	8,069.58	593.17
1,610.30	598.98	1,931.40	1,851.96	93.23	20,413.68	23,177.70	2,764.02
732.56	265.33	831.00	823.11	40.11	9,686.71	9,972.60	285.89
315.32	105.33	293.70	330.97	14.17	3,986.66	4,587.32	600.66
297.71	88.02	206.40	288.01	9.96	3,322.78	3,738.14	415.36
78.70	22.27	46.20	72.93	2.23	903.70	1,003.22	99.52
1,042.01	396.46	1,223.70	1,209.86	59.06	13,901.66	14,682.87	781.21
6,738.27	2,891.57	12,004.50	9,269.71	579.42	107,909.94	112,041.73	4,131.79
1,151.57	393.14	1,203.00	1,258.52	58.07	14,602.31	15,711.78	1,109.47
2,401.09	881.35	2,913.30	2,768.33	140.62	31,535.72	34,961.10	3,425.38
226.04	86.85	360.60	287.67	17.40	3,873.41	4,085.62	212.21
1,227.73	407.10	1,020.60	1,255.73	49.26	15,188.95	15,765.97	577.02
10,284.36	4,412.06	18,432.00	14,087.73	889.65	167,863.65	165,887.10	(1,976.55)
2,955.40	1,039.98	3,357.00	3,322.36	162.03	37,723.73	40,284.90	2,561.17
841.51	246.62	546.90	800.12	26.39	9,369.87	10,274.39	904.52
3,409.41	1,052.12	3,045.60	3,545.58	146.99	39,608.24	42,380.41	2,772.17
231.05	68.75	183.90	231.01	8.87	2,814.60	3,287.41	472.81
14,115.81	6,160.98	25,705.80	19,463.15	1,240.73	230,797.45	239,919.98	9,122.53
1,438.84	519.85	1,710.30	1,641.75	82.55	18,267.85	18,813.27	545.42
130,101.11	59,471.31	284,374.50	196,183.81	13,725.79	2,301,443.87	2,322,390.00	20,946.13
984.41	329.18	906.30	1,033.92	43.75	12,053.22	13,038.10	984.88
1,048.09	383.05	1,145.40	1,183.53	55.29	13,644.48	14,891.80	1,247.32
645.45	182.88	438.60	617.21	21.17	6,657.06	7,360.77	703.71
3,152.76	1,342.80	5,583.90	4,293.90	269.51	51,266.05	53,976.66	2,710.61
233.87	74.69	196.20	239.29	9.47	2,857.91	3,072.20	214.29
684.96	289.39	1,133.70	892.42	54.72	10,451.07	10,957.63	506.56
3,913.89	1,600.22	6,173.70	5,051.62	297.98	60,708.01	60,039.57	(668.44)
573.63	179.13	492.30	584.51	23.76	6,548.72	6,620.49	71.77
1,304.72	481.03	1,394.40	1,461.01	67.30	16,797.46	18,128.14	1,330.68
28,308.97	12,354.12	51,432.00	39,086.82	2,482.45	458,111.05	462,889.13	4,778.08
282.37	95.21	294.00	308.23	14.19	4,015.93	4,115.65	99.72
483.03	186.38	578.70	565.31	27.93	6,710.70	7,137.53	426.83
3,574.09	1,270.86	3,864.90	4,019.88	186.55	46,113.10	48,956.30	2,843.20
2,266.27	851.25	2,746.50	2,629.94	132.56	31,679.08	33,872.91	2,193.83
49,455.55	21,864.23	94,771.50	70,177.33	4,574.29	817,697.56	852,942.14	35,244.58
2,468.70	989.57	2,936.40	2,831.70	141.73	35,291.18	31,078.15	(4,213.03)
851.06	333.34	1,225.50	1,055.98	59.15	12,495.21	13,889.53	1,394.32

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horsepower supplied in year after correction for power factor	Share of operating		
	To Jan. 1, 1936	To Oct. 31 1936			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Long Branch	30.00	30.00	175,404.36	733.7	2,554.33	3,672.38	8,531.41
Lucan	39.00	38.00	35,719.83	130.1	452.93	1,197.66	1,752.86
Lynden	40.00	38.00	24,027.18	84.5	294.18	662.98	1,168.74
Markham	43.00	37.00	69,627.39	244.3	850.51	2,168.47	3,382.87
Merlin	48.00	46.00	32,973.86	95.9	333.87	837.86	1,604.04
Merritton	24.00	24.00	724,584.49	3,905.8	13,597.78	14,780.65	35,185.77
Milton	35.00	35.00	182,488.22	677.4	2,358.32	5,086.24	8,841.43
Milverton	36.00	36.00	77,585.38	268.2	933.72	2,086.36	3,772.69
Mimico	26.00	26.00	453,484.98	2,098.0	7,304.05	9,028.45	22,056.11
Mitchell	33.00	34.00	117,525.87	442.9	1,541.93	3,016.17	5,718.66
Moorefield	65.00	65.00	20,612.80	42.2	146.92	633.61	1,003.15
Mount Brydges	42.00	42.00	25,761.44	90.0	313.33	1,061.40	1,252.51
Newbury	54.00	54.00	16,708.11	42.9	149.35	623.52	812.82
New Hamburg	35.00	35.00	120,906.09	432.2	1,504.68	2,480.25	5,883.06
New Toronto	30.00	30.00	1,429,099.54	5,945.7	20,699.55	28,685.99	69,509.37
Niagara Falls	19.00	19.00	1,499,177.57	8,709.2	30,320.48	28,306.55	72,920.95
Niagara-on-the Lake	27.00	27.00	100,234.81	515.9	1,796.07	2,891.64	4,875.60
Norwich	36.00	35.00	91,806.90	334.0	1,162.80	2,482.26	4,465.85
Oil Springs	44.00	44.00	65,929.41	196.3	683.41	1,897.46	3,223.58
Otterville	48.00	45.00	30,965.37	90.2	314.03	871.13	1,506.34
Palmerston	40.00	40.00	118,954.05	391.4	1,362.63	3,560.57	5,790.18
Paris	28.00	28.00	280,948.74	1,224.4	4,262.67	6,253.83	13,673.54
Parkhill	64.00	60.00	67,659.14	136.5	475.22	1,656.57	3,290.58
Petrolia	40.00	40.00	281,898.24	903.3	3,144.78	7,888.75	13,714.60
Plattsville	55.00	50.00	26,171.59	65.4	227.69	747.96	1,274.81
Point Edward	40.00	38.00	274,181.66	1,021.8	3,557.33	9,557.65	13,339.07
Port Colborne	29.00	29.00	325,688.02	1,390.5	4,840.93	6,262.63	15,842.52
Port Credit	34.00	34.00	150,940.91	590.8	2,056.83	4,332.60	7,354.77
Port Dalhousie	30.00	30.00	136,064.61	598.0	2,081.90	3,286.87	6,624.31
Port Dover	38.00	38.00	95,235.27	317.7	1,106.05	2,385.85	4,634.67
Port Rowan	60.00	55.00	23,630.24	58.8	204.71	653.97	1,145.52
Port Stanley	40.00	39.00	119,400.63	381.1	1,326.77	2,895.88	5,694.36
Preston	27.00	27.00	561,548.83	2,505.5	8,722.73	12,391.02	27,320.98
Princeton	50.00	45.00	37,189.20	105.0	365.55	1,121.27	1,811.72
Queenston	29.00	29.00	18,810.85	91.2	317.51	655.21	915.01
Richmond Hill	35.00	35.00	90,502.90	336.1	1,170.11	2,568.44	4,396.73
Ridgetown	38.00	38.00	126,643.92	431.4	1,501.89	3,898.28	6,151.31
Riverside	34.00	34.00	262,106.92	897.0	3,122.84	5,124.24	12,752.10
Rockwood	42.00	40.00	32,259.00	97.8	340.48	994.62	1,561.88
Rodney	52.00	48.00	45,594.13	117.3	408.37	1,610.24	2,213.41

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges							
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund	Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,335.54	555.89	2,201.10	1,769.89	106.24	20,726.78	22,011.00	1,284.22
313.05	116.35	390.30	365.80	18.84	4,607.79	4,966.28	358.49
214.39	74.96	253.50	244.13	12.23	2,925.11	3,240.64	315.53
567.26	216.79	732.90	706.66	35.37	8,660.83	9,272.62	611.79
323.37	109.10	287.70	337.15	13.89	3,846.98	4,440.47	593.49
4,243.38	2,011.11	11,717.40	7,207.65	565.56	89,309.30	93,738.77	4,429.47
1,542.32	546.30	2,032.20	1,842.85	98.09	22,347.75	23,708.11	1,360.36
689.67	261.56	804.60	788.54	38.84	9,375.98	9,656.01	280.03
3,097.74	1,364.13	6,294.00	4,554.66	303.79	54,002.93	54,549.04	546.11
981.21	375.66	1,328.70	1,191.47	64.13	14,217.93	14,985.54	767.61
234.77	63.55	126.60	212.71	6.11	2,427.42	2,741.46	314.04
228.87	82.28	270.00	261.69	13.03	3,483.11	3,779.30	296.19
174.03	56.21	128.70	171.45	6.21	2,122.29	2,317.50	195.21
1,059.53	391.52	1,296.60	1,228.16	62.58	13,906.38	15,125.37	1,218.99
10,937.93	4,590.42	17,837.10	14,423.42	860.94	167,544.72	178,370.75	10,826.03
7,908.12	4,052.30	26,127.60	14,873.49	1,261.08	185,770.57	165,474.31	(20,296.26)
639.88	269.78	1,547.70	1,001.39	74.71	13,096.77	13,928.81	832.04
794.49	301.47	1,002.00	931.69	48.37	11,188.93	11,748.88	559.95
640.92	227.56	588.90	677.19	28.43	7,967.45	8,638.77	671.32
307.14	98.79	270.60	316.60	13.06	3,697.69	4,109.53	411.84
1,094.18	390.27	1,174.20	1,212.32	56.68	14,641.03	15,656.76	1,015.73
2,085.86	885.23	3,673.20	2,831.58	177.29	33,843.20	34,281.76	438.56
775.95	201.36	409.50	697.93	19.77	7,526.88	8,289.66	762.78
2,604.29	952.35	2,709.90	2,873.99	130.69	34,019.35	36,802.92	2,783.57
279.28	82.44	196.20	269.08	9.47	3,086.93	3,319.92	232.99
2,275.46	912.07	3,065.40	2,780.34	147.95	35,635.27	39,196.08	3,560.81
2,520.32	1,064.83	4,171.50	3,283.69	201.34	38,187.76	40,324.31	2,136.55
1,235.28	491.22	1,772.40	1,530.14	85.55	18,858.79	20,088.29	1,229.50
1,031.11	408.67	1,794.00	1,371.29	86.59	16,684.74	17,940.25	1,255.51
876.28	301.54	953.10	969.92	46.00	11,273.41	12,072.55	799.14
250.90	71.73	176.40	241.79	8.51	2,753.53	3,284.26	530.73
1,089.59	374.43	1,143.30	1,192.66	55.18	13,772.17	14,896.87	1,124.70
4,061.00	1,777.07	7,516.50	5,651.61	362.80	67,803.71	67,647.77	(155.94)
375.93	119.16	315.00	381:15	15.20	4,504.98	4,807.11	302.13
129.49	54.15	273.60	188.51	13.21	2,546.69	2,643.30	96.61
701.08	284.47	1,008.30	916.51	48.66	11,094.30	11,763.43	669.13
1,126.52	418.80	1,294.20	1,286.31	62.46	15,739.77	16,394.75	654.98
2,299.66	895.78	2,691.00	2,666.33	129.89	29,681.84	30,499.10	817.26
311.67	106.78	293.40	327.84	14.16	3,950.83	3,947.62	(3.21)
477.41	141.91	351.90	466.80	16.98	5,687.02	5,721.30	34.28

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
	To Jan. 1, 1936	To Oct. 31 1936			Cost of power pur-chased	Operation, main-tenance and adminis-trative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
St. Catharines	23.00	23.00	1,811,563.51	9,764.0	33,992.71	36,522.02	88,128.09
St. Clair Beach	40.00	40.00	21,377.62	64.8	225.60	564.59	1,040.06
St. George	40.00	40.00	43,536.34	147.8	514.56	1,248.88	2,117.80
St. Jacobs	34.00	34.00	66,174.98	254.7	886.72	1,642.19	3,210.25
St. Marys	36.00	36.00	338,296.03	1,283.4	4,468.07	10,715.14	16,464.77
St. Thomas	28.00	28.00	1,502,176.51	6,715.6	23,379.91	32,342.20	73,003.78
Sarnia	34.00	33.00	1,986,243.14	7,286.7	25,368.15	43,520.06	96,653.74
Scarboro twp	32.00	32.00	789,544.45	2,971.6	10,345.42	13,991.59	38,400.93
Seaforth	35.00	35.00	134,757.99	478.4	1,665.52	3,232.19	6,557.10
Simcoe	30.00	30.00	409,060.06	1,692.6	5,892.67	8,244.20	19,908.25
Springfield	53.00	48.00	25,402.19	62.4	217.24	696.70	1,234.94
Stamford twp	21.00	21.00	336,840.91	1,941.0	6,757.46	6,712.17	16,384.16
Stouffville	46.00	45.00	68,503.15	197.3	686.89	2,236.64	3,329.06
Stratford	30.00	30.00	1,576,596.57	6,600.3	22,978.50	35,507.54	76,716.06
Strathroy	34.00	34.00	268,563.32	1,010.3	3,517.29	5,709.06	13,091.23
Streetsville	40.00	40.00	30,634.62	111.7	388.88	1,083.98	1,484.33
Sutton	55.00	52.00	76,804.88	197.9	688.98	2,485.26	3,744.85
Tavistock	36.00	36.00	139,092.19	492.3	1,713.91	3,407.40	6,664.44
Tecumseh	38.00	37.00	87,665.27	279.8	974.10	2,235.70	4,265.13
Thamesford	40.00	40.00	41,096.57	142.3	495.41	1,195.80	1,999.38
Thamesville	41.00	40.00	52,786.92	185.9	647.20	1,783.77	2,567.92
Thedford	68.00	67.00	36,036.22	71.4	248.57	1,321.11	1,753.24
Thorndale	65.00	65.00	17,913.78	38.7	134.73	763.35	875.53
Thorold	25.00	25.00	403,110.07	2,032.8	7,077.05	8,557.67	19,608.01
Tilbury	38.00	38.00	155,498.55	531.3	1,849.68	4,549.42	7,564.25
Tillsonburg	34.00	33.00	245,240.33	917.8	3,195.26	5,846.06	11,929.37
Toronto	26.10	26.10	61,711,795.39	270,461.9	941,594.70	1,025,793.31	3,001,297.49
Toronto twp	32.00	32.00	465,004.09	1,806.4	6,288.86	12,365.83	21,767.94
Trafalgar twp	....	....	110,379.40	430.5	1,498.76	2,567.34	5,365.72
Wallaceburg	37.00	36.00	523,781.12	1,778.9	6,193.12	13,526.40	25,482.89
Wardsville	62.00	62.00	13,672.11	32.0	111.41	544.19	665.13
Waterdown	32.00	32.00	52,007.06	211.5	736.32	1,227.05	2,529.57
Waterford	32.00	32.00	92,258.19	363.2	1,264.46	2,058.24	4,489.98
Waterloo	27.00	27.00	693,548.60	3,019.6	10,512.53	14,121.38	33,747.28
Watford	54.00	50.00	86,434.52	223.1	776.71	2,984.99	4,208.08
Welland	24.00	24.00	774,091.86	3,793.4	13,206.47	13,771.25	37,644.56
Wellesley	50.00	50.00	37,483.99	96.5	335.96	1,067.03	1,823.82
West Lorne	43.00	40.00	31,954.91	101.6	353.71	1,142.90	1,553.47
Weston	27.00	27.00	677,106.58	3,066.0	10,674.07	12,798.78	32,932.60
Wheatley	53.00	53.00	55,199.87	129.8	451.89	1,496.32	2,684.15

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c
10,659.79	5,026.24	29,292.00	18,054.62	1,413.82	223,089.29	224,571.38	1,482.09
202.76	71.96	194.40	218.34	9.38	2,527.09	2,593.28	66.19
395.84	138.21	443.40	442.93	21.40	5,323.02	5,911.96	588.94
545.25	216.09	764.10	668.21	36.88	7,969.69	8,660.61	690.92
2,752.80	1,136.13	3,850.20	3,429.54	185.84	43,002.49	46,201.50	3,199.01
10,771.06	4,733.85	20,146.80	15,099.38	972.42	180,449.40	188,035.36	7,585.96
16,698.42	6,571.28	21,860.10	20,158.33	1,055.12	231,885.20	241,811.78	9,926.58
6,052.94	2,418.11	8,914.80	8,001.00	430.29	88,555.08	95,090.90	6,535.82
1,177.03	424.90	1,435.20	1,369.22	69.27	15,930.43	16,743.26	812.83
3,193.65	1,272.68	5,077.80	4,132.10	245.09	47,966.44	50,777.09	2,810.65
271.68	77.16	187.20	260.76	9.03	2,954.71	3,068.95	114.24
1,803.29	912.17	5,823.00	3,343.47	281.05	42,016.77	40,760.79	(1,255.98)
642.19	209.06	591.90	699.92	28.57	8,424.23	8,913.11	488.88
12,000.09	5,123.89	19,800.90	15,914.84	955.72	188,997.54	198,008.00	9,010.46
2,270.46	815.50	3,030.90	2,727.90	146.29	31,308.63	34,348.46	3,039.83
262.47	102.32	335.10	309.59	16.18	3,982.85	4,467.75	484.90
769.20	234.47	593.70	789.84	28.65	9,334.95	10,361.67	1,026.72
1,185.59	451.06	1,476.90	1,391.00	71.28	16,361.58	17,724.27	1,362.69
805.92	296.04	839.40	893.90	40.51	10,350.70	10,398.25	47.55
367.73	130.80	426.90	417.88	20.61	5,054.51	5,691.95	637.44
459.91	175.74	557.70	536.38	26.92	6,755.54	7,473.01	717.47
412.16	114.80	214.20	372.00	10.34	4,446.42	4,793.94	347.52
202.30	54.64	116.10	185.45	5.61	2,337.71	2,516.55	178.84
2,607.86	1,163.37	6,098.40	4,031.62	294.34	49,438.32	50,819.62	1,381.30
1,383.84	514.22	1,593.90	1,581.68	76.93	19,113.92	20,190.93	1,077.01
2,077.64	770.24	2,753.40	2,486.09	132.90	29,190.96	30,455.48	1,264.52
398,675.54	178,901.67	811,385.70	621,345.66	39,163.04	7,018,157.11	7,059,055.77	40,898.66
3,541.19	1,436.84	5,419.20	4,522.73	261.58	55,604.17	57,805.04	2,200.87
914.41	378.10	1,291.50	1,116.37	62.33	13,194.53	11,132.96	(2,061.57)
4,681.54	1,708.73	5,336.70	5,329.62	257.59	62,516.59	64,383.89	1,867.30
147.95	44.41	96.00	140.61	4.63	1,754.33	1,983.95	229.62
414.60	162.89	634.50	525.41	30.62	6,260.96	6,768.72	507.76
752.53	300.26	1,089.60	933.86	52.60	10,941.53	11,621.40	679.87
5,134.79	2,202.70	9,058.80	6,988.80	437.24	82,203.52	81,529.23	(674.29)
896.27	281.07	669.30	887.47	32.31	10,736.20	11,304.45	568.25
5,243.07	2,393.61	11,380.20	7,751.54	549.28	91,939.98	91,042.52	(897.46)
393.89	114.90	289.50	384.66	13.97	4,423.73	4,826.63	402.90
301.39	102.61	304.80	325.61	14.71	4,099.20	4,121.25	22.05
4,742.82	2,025.56	9,198.00	6,807.64	443.95	79,623.42	82,782.63	3,159.21
591.39	169.46	389.40	567.38	18.79	6,368.78	6,881.14	512.36

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horsepower supplied in year after correction for power factor	Share of operating		
	To Jan. 1, 1936	To Oct. 31 1936			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Windsor		30.50	8,687,215.20	34,290.4	119,379.71	158,735.50	422,318.40
Woodbridge	35.00	35.00	92,170.83	339.7	1,182.64	1,915.99	4,483.22
Woodstock	28.00	28.00	1,147,289.68	4,944.8	17,214.99	25,149.17	55,806.62
Wyoming	54.00	52.00	27,157.43	66.4	231.17	924.44	1,321.21
York East twp	32.00	32.00	1,264,709.71	5,514.2	19,197.31	49,508.98	61,508.13
York North twp	32.00	32.00	787,494.90	3,098.1	10,785.82	21,287.69	38,305.49
Zurich	65.00	62.00	35,074.07	72.9	253.80	938.71	1,706.25
Mimico Asylum			35,971.07	145.2	505.50	662.77	1,749.60
Ont. Reformatory			63,983.45	267.4	930.94	1,366.25	3,092.13
Prison Brick Yard			24,601.61	86.6	301.49	395.66	1,196.63
Toronto Transportation Com			79,686.49	359.8	1,252.62	1,484.26	3,875.73
Sandwich, Windsor & Amherstburg Rly. Co			690,435.01	2,704.6	9,415.88	12,319.58	33,591.05
Totals—Municipalities			144,281,834.71	628,716.5	2,188,833.75	2,725,973.90	7,016,113.44
RURAL POWER DISTRICTS							
Acton R.P.D.—Erin, Esquesing and Nassagaweya twps			2,960.37	11.0	38.30	64.69	143.11
Ailsa Craig R.P.D.—Lobo, McGillivray and Williams E. twps.			2,331.07	6.4	22.29	66.08	113.33
Alvinston R.P.D.—Brooke twp			1,868.84	3.1	10.79	54.95	90.99
Amherstburg R.P.D.—Anderdon, Colchester N., Colchester S. and Malden twps			183,504.39	599.3	2,086.42	4,055.54	8,930.58
Aylmer R.P.D.—Bayham, Dereham, Dorchester N., Dorchester S., Malahide and Yarmouth twps			95,049.58	335.7	1,168.72	2,015.07	4,619.05
Ayr R.P.D.—Blenheim, Dumfries N. and Dumfries S. twps			11,456.19	45.5	158.40	355.36	557.55
Baden R.P.D.—Blandford, Blenheim, Easthope N., Easthope S., Waterloo, Wellesley, Wilmot and Zorra E. twps			125,421.54	440.9	1,534.96	2,282.17	5,692.80
Beamsville R.P.D.—Caistor, Clinton, Gainsborough, Grimsby N., Grimsby S., Louth, Pelham and Wainfleet twps			300,366.03	1,211.5	4,217.75	7,531.00	14,598.71
Belle River R.P.D.—Maidstone and Rochester twps			65,508.98	222.5	774.62	1,718.27	3,187.60
Blenheim R.P.D.—Raleigh and Harwich twps			46,123.06	156.0	543.11	1,165.49	2,243.72

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
67,819.87	28,099.13	102,871.20	87,823.85	4,965.23	992,012.89	1,039,037.63	47,024.74
782.74	299.35	1,019.10	934.85	49.19	10,667.08	11,889.36	1,222.28
8,583.88	3,703.27	14,834.40	11,562.17	716.01	137,570.51	138,454.11	883.60
288.00	87.23	199.20	279.02	9.61	3,339.88	3,480.27	140.39
8,226.09	3,671.27	16,542.60	12,736.74	798.46	172,189.58	176,453.29	4,263.71
5,822.98	2,437.00	9,294.30	7,967.16	448.60	96,349.04	99,137.28	2,788.24
398.64	107.17	218.70	361.67	10.56	3,995.50	4,557.60	562.10
283.18	114.78	435.60	363.51	21.03	4,135.97	4,428.84	292.87
488.85	202.75	802.20	641.33	38.72	7,563.17	7,889.24	326.07
216.12	76.33	259.80	249.95	12.54	2,708.52	2,642.11	(66.41)
559.99	239.49	1,079.40	801.28	52.10	9,344.87	11,434.66	2,089.79
5,435.92	2,230.42	8,113.80	6,987.86	391.62	78,486.13	78,486.13	....
1,008,885.68	436,998.25	1,874,886.60	1,452,912.15	90,494.49	16,795,098.26	17,111,479.86	348,724.62 (32,343.02)
25.01	9.57	33.00	29.82	1.59	345.09	345.09	see page 213
23.77	7.29	19.20	23.87	.93	276.76	276.76	"
22.48	5.71	9.30	19.37	.45	214.04	214.04	"
1,663.07	609.65	1,797.90	1,870.30	86.77	21,100.23	21,100.23	"
837.40	308.43	1,007.10	964.68	48.61	10,969.06	10,969.06	"
92.73	36.72	136.50	115.92	6.59	1,459.77	1,459.77	"
985.66	382.11	1,322.70	1,186.07	63.85	13,450.32	13,450.32	"
2,447.27	896.92	3,634.50	3,032.68	175.42	36,534.25	36,534.25	"
577.97	217.65	667.50	666.68	32.23	7,842.52	7,842.52	"
413.32	152.83	468.00	469.33	22.59	5,478.39	5,478.39	"

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Bond Lake R.P.D.—King, Markham, Scarboro, Tecumseth, Vaughan, Whitchurch and York N. twps.	314,092.99	1,086.1	3,781.18	9,097.74	15,273.16
Bothwell R.P.D.—Aldborough, Ekfrid, Mosa, Orford and Zone twps.	66,154.25	197.3	686.89	1,920.37	3,218.24
Brampton R.P.D.—Chinguacousy and Toronto twps.	36,801.01	153.0	532.66	1,695.03	1,782.10
Brant R.P.D.—Blenheim, Brantford, Burford, Dumfries S., Oakland, Onondaga and Tuscarora twps.	130,431.17	556.7	1,938.11	4,365.51	6,347.91
Brigden R.P.D.—Moore and Sombra twps.	24,244.48	50.0	174.07	633.66	1,180.44
Burford R.P.D.—Brantford, Burford, Oakland, Townsend and Windham twps.	46,482.25	166.6	580.01	1,015.61	2,262.11
Caledonia R.P.D.—Ancaster, Barton, Binbrook, Caistor, Glanford, Grimsby S., Oneida, Onondaga and Seneca twps.	86,207.91	349.8	1,217.80	1,981.86	4,194.06
Chatham R.P.D.—Chatham, Dover, Harwich and Raleigh twps.	122,463.74	491.1	1,709.73	3,372.14	5,957.11
Chippawa R.P.D.—Bertie, Crowland and Willoughby twps.	22,763.92	115.8	403.15	519.15	1,107.25
Clinton R.P.D.—Goderich, Hay, Hullett, Stanley and Tuckersmith twps.	43,161.15	132.3	460.59	1,251.89	2,100.12
Delaware R.P.D.—Caradoc, Delaware, Ekfrid, Lobo, London, Southwold and Westminster twps.	87,691.99	340.2	1,184.39	1,974.76	4,263.20
Dorchester R.P.D.—Dorchester N., Dorchester S., London, Nissouri E., Nissouri W., Oxford N., Westminster and Yarmouth twps.	95,600.77	350.8	1,221.28	2,121.10	4,654.55
Dresden R.P.D.—Camden, Chatham and Dawn twps.	12,828.25	39.0	135.78	347.79	624.04
Drumbo R.P.D.—Blandford, Blenheim and Burford twps.	35,029.14	99.8	347.45	892.76	1,706.40
Dundas R.P.D.—Ancaster, Barton, Beverly, Flamboro E., Flamboro W., Glanford and Nelson twps.	152,376.18	667.6	2,324.20	2,999.96	7,411.65
Dunnville R.P.D.—Canborough, Dunn and Moulton twps.	11,176.33	43.6	151.79	357.09	543.73
Dutton R.P.D.—Aldborough and Dunwich twps.	42,348.14	139.1	484.27	1,226.75	2,058.68
Elmira R.P.D.—Peel, Pilkington and Woolwich twps.	26,504.72	93.7	326.22	466.80	1,289.63

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,593.96	983.96	3,258.30	3,192.23	157.26	38,337.79	38,337.79	see page 213
640.11	218.72	591.90	675.93	28.57	7,980.73	7,980.73	"
282.11	112.83	459.00	369.73	22.15	5,255.61	5,255.61	"
988.76	420.57	1,670.10	1,315.79	80.61	17,127.36	17,127.36	"
274.08	79.00	150.00	250.26	7.24	2,748.75	2,748.75	"
407.63	154.91	499.80	472.20	24.13	5,416.40	5,416.40	"
688.94	275.86	1,049.40	871.22	50.64	10,329.78	10,329.78	"
960.09	399.54	1,473.30	1,238.05	71.10	15,181.06	15,181.06	"
147.58	67.23	347.40	227.55	16.77	2,836.08	2,836.08	"
413.93	140.31	396.90	440.72	19.15	5,223.61	5,223.61	"
719.83	281.12	1,020.60	887.18	49.26	10,380.34	10,380.34	"
821.95	309.88	1,052.40	970.77	50.79	11,202.72	11,202.72	"
122.78	41.98	117.00	130.99	5.65	1,526.01	1,526.01	"
352.49	110.15	299.40	358.91	14.45	4,082.01	4,082.01	"
1,141.86	489.45	2,002.80	1,534.99	96.68	18,001.59	18,001.59	"
94.29	38.81	130.80	113.13	6.31	1,435.95	1,435.95	"
391.61	135.60	417.30	431.04	20.14	5,165.39	5,165.39	"
234.08	87.12	281.10	269.33	13.57	2,967.85	2,967.85	"

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Elora R.P.D.—Garafraxa W., Nichol, Peel and Pilkington twps	33,038.71	110.2	383.66	737.64	1,599.24
Essex R.P.D.—Colchester N., Gosfield N., Gosfield S., Maidstone, Mersea, Rochester and Sandwich S. twps	61,975.10	212.6	740.15	1,372.36	3,016.08
Exeter R.P.D.—Biddulph, Bosanquet, Hay, Hibbert, Stephen, Tuckersmith and Usborne twps	105,874.97	307.4	1,070.18	2,320.52	5,155.86
Forest R.P.D.—Adelaide, Bosanquet, Plympton, Warwick and Williams W. twps	16,994.41	43.2	150.40	477.13	826.84
Galt R.P.D.—Beverly, Dumfries N., Dumfries S. and Puslinch twps	47,673.00	204.9	713.35	2,352.40	2,319.44
Georgetown R.P.D.—Chinuacousy, Erin and Esquesing twps	42,260.68	146.6	510.38	928.89	2,045.21
Goderich R.P.D.—Ashfield, Colborne, Goderich and Wawanosh W. twps	43,817.78	105.2	366.25	1,008.97	2,132.01
Grantham R.P.D.—Grantham and Niagara twps	129,923.24	569.7	1,983.39	4,447.06	6,323.41
Guelph R.P.D.—Eramosa, Erin, Flamboro E., Guelph, Nassagaweya and Puslinch twps	120,712.21	476.1	1,657.51	2,888.21	5,869.07
Haldimand R.P.D.—Cayuga N., Cayuga S., Oneida, Rainham, Seneca and Walpole twps	78,516.23	233.6	813.26	1,715.27	3,824.21
Harriston R.P.D.—Howick and Minto twps	6,612.02	18.5	64.41	162.68	321.80
Harrow R.P.D.—Colchester N., Colchester S., Gosfield S. and Malden twps	133,752.24	428.3	1,491.09	3,339.60	6,509.53
Ingersoll R.P.D.—Dereham, Dorchester N., Nissouri E., Oxford N., Oxford W., Zorra E. and Zorra W. twps	126,870.72	450.2	1,567.33	3,003.93	6,175.60
Jordan R.P.D.—Grantham, Louth, Pelham and Thorold twps	78,869.44	352.2	1,226.16	1,491.62	3,833.29
Keswick R.P.D.—Georgina, Gwillimbury E., Gwillimbury N. twps	169,418.17	494.8	1,722.61	5,475.74	8,241.69
Kingsville R.P.D.—Gosfield N., Gosfield S., Mersea and Romney twps	216,918.06	703.5	2,449.19	4,764.90	10,551.66
Listowel R.P.D.—Elma, Grey, Maryborough, Mornington, Peel, Wallace and Wellesley twps	54,670.27	193.4	673.31	1,450.02	2,660.27
London R.P.D.—Delaware, Lobo, London, Nissouri W. and Westminster twps	447,030.63	1,771.5	6,167.36	10,650.79	21,740.67

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to
from each Municipality, and the amount remaining to be credited
supplied to it in the year ending October 31, 1936

costs and fixed charges							
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund	Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
301.50	107.30	330.60	334.62	15.96	3,810.52	3,810.52	see page 213
543.10	206.64	637.80	630.58	30.78	7,177.49	7,177.49	"
1,052.30	335.73	922.20	1,083.80	44.51	11,985.10	11,985.10	"
177.26	55.32	129.60	174.46	6.25	1,997.26	1,997.26	"
358.35	152.27	614.70	480.61	29.67	7,020.79	7,020.79	"
375.92	134.08	439.80	427.35	21.23	4,882.86	4,882.86	"
471.60	151.15	315.60	450.46	15.23	4,911.27	4,911.27	"
988.89	396.65	1,709.10	1,309.12	82.50	17,240.12	17,240.12	"
982.51	401.18	1,428.30	1,220.55	68.93	14,516.26	14,516.26	"
775.53	243.18	700.80	803.28	33.82	8,909.35	8,909.35	"
66.55	21.20	55.50	67.71	2.68	762.53	762.53	"
1,227.75	442.11	1,284.90	1,364.16	62.01	15,721.15	15,721.15	"
1,118.43	415.40	1,350.60	1,289.60	65.18	14,986.07	14,986.07	"
586.27	244.66	1,056.60	792.89	51.00	9,282.49	9,282.49	"
1,577.49	524.29	1,484.40	1,732.11	71.64	20,829.97	20,829.97	"
1,973.27	715.58	2,110.50	2,210.27	101.86	24,877.23	24,877.23	"
478.76	179.83	580.20	555.58	28.00	6,605.97	6,605.97	"
3,606.82	1,473.00	5,314.50	4,520.47	256.52	53,730.13	53,730.13	see page 215

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Lucan R.P.D.—Biddulph, Blanshard, London, McGillivray and Stephen twps	16,861.77	60.9	212.03	400.71	827.01
Lynden R.P.D.—Ancaster, Beverly, Brantford and Dumfries S. twps	50,482.51	181.7	632.57	1,244.88	2,455.57
Markham R.P.D.—Markham, Pickering, Scarboro, Uxbridge and Whitchurch twps	142,063.45	489.1	1,702.77	3,975.22	6,902.41
Merlin R.P.D.—Raleigh, Romney and Tilbury E. twps	70,451.99	204.9	713.35	1,612.65	3,427.23
Milton R.P.D.—Esquesing, Nassagaweya, Nelson and Trafalgar twps	48,541.66	171.8	598.11	1,697.10	2,352.25
Milverton R.P.D.—Ellice, Elma, Mornington and Wellesley twps	26,324.64	91.0	316.81	657.92	1,280.07
Mitchell R.P.D.—Downie, Ellice, Elma, Fullarton, Hibbert, Logan and McKillop twps	57,734.30	203.8	709.52	1,523.06	2,810.23
Newmarket R.P.D.—Georgina, Gwillimbury E., King, Scott, Uxbridge and Whitchurch twps	76,186.43	265.0	922.58	2,178.49	3,701.57
Niagara R.P.D.—Niagara and Stamford twps	99,257.78	524.7	1,826.70	2,777.02	4,828.09
Norwich R.P.D.—Burford, Dereham, Middleton, Norwich N., Norwich S., Oxford E. and Windham twps	87,097.34	315.4	1,098.04	2,052.02	4,236.67
Oil Springs R.P.D.—Brooke, Dawn, Enniskillen and Euphemia twps	13,671.67	40.2	139.96	374.51	668.03
Palmerston R.P.D.—Arthur, Maryborough, Minto, Peel and Wallace twps	16,320.46	53.7	186.95	451.94	794.41
Petrolia R.P.D.—Enniskillen, Moore, Plympton and Sarnia twps	9,395.74	29.7	103.40	234.68	457.10
Preston R.P.D.—Dumfries N., Guelph, Puslinch, Waterloo and Woolwich twps	226,703.27	911.5	3,173.33	4,537.96	11,030.09
Ridgetown R.P.D.—Aldborough, Harwich, Howard and Orford twps and Rondeau Park	101,951.92	301.4	1,049.31	3,023.32	4,957.33
St. Jacobs R.P.D.—Peel, Waterloo, Wellesley and Woolwich twps	62,959.99	238.9	831.72	1,370.72	3,054.97
St. Marys R.P.D.—Blanshard, Downie, Fullarton, Nissouri E., Nissouri W. and Usborne twps	78,914.36	256.5	892.99	2,116.37	3,840.81
St. Thomas R.P.D.—Dunwich, Southwold, Westminster and Yarmouth twps	179,017.77	721.7	2,512.55	4,173.74	8,700.63
Saltfleet R.P.D.—Barton, Binbrook, Grimsby N. and Saltfleet twps	270,963.57	1,018.4	3,545.48	5,907.62	12,851.08

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to
from each Municipality, and the amount remaining to be credited
supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
148.55	54.75	182.70	172.64	8.82	2,007.21	2,007.21	see page 215
443.28	157.90	545.10	512.50	26.30	6,018.10	6,018.10	"
1,175.68	440.94	1,467.30	1,442.86	70.82	17,178.00	17,178.00	"
690.92	233.11	614.70	720.37	29.67	8,042.00	8,042.00	"
425.05	145.32	515.40	491.16	24.88	6,249.27	6,249.27	"
234.01	88.75	273.00	267.55	13.18	3,131.29	3,131.29	"
506.62	196.08	611.40	586.94	29.51	6,973.36	6,973.36	"
625.21	238.92	795.00	773.46	38.37	9,273.60	9,273.60	"
610.50	280.29	1,574.10	990.19	76.01	12,962.90	12,962.90	"
756.27	285.68	946.20	884.02	45.66	10,304.56	10,304.56	"
133.75	47.68	120.60	140.38	5.82	1,630.73	1,630.73	"
150.12	53.55	161.10	166.33	7.78	1,972.18	1,972.18	"
87.53	31.38	89.10	95.84	4.30	1,103.33	1,103.33	"
1,812.59	755.45	2,734.50	2,292.12	131.97	26,468.01	26,468.01	"
990.45	332.66	904.20	1,041.46	43.64	12,342.37	12,342.37	"
524.95	204.88	716.70	636.26	34.59	7,374.79	7,374.79	"
720.36	280.50	769.50	804.50	37.13	9,462.16	9,462.16	"
1,421.16	588.78	2,165.10	1,807.76	104.49	21,474.21	21,474.21	"
2,229.82	866.65	3,055.20	2,676.31	147.46	31,279.62	31,279.62	"

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Sandwich R.P.D.—Anderton, Colchester N., Maidstone, Sandwich E., Sandwich S. and Sandwich W. twps	266,485.45	988.3	3,440.70	5,371.18	12,965.08
Sarnia R.P.D.—Moore, Plympton and Sarnia twps.	183,664.72	611.2	2,127.85	4,598.61	8,935.40
Scarboro R.P.D.—Pickering, Scarboro and York N. twps	121,855.41	428.4	1,491.45	2,198.72	5,926.77
Seaforth R.P.D.—Hibbert, Hullett, McKillop and Tuckersmith twps	18,609.89	63.3	220.37	423.44	905.56
Simcoe R.P.D.—Charlotteville, Townsend, Walpole, Windham and Woodhouse twps	67,789.00	271.1	943.81	2,095.37	3,297.29
Stamford R.P.D.—Stamford and Thorold twps	33,534.31	162.0	563.99	639.88	1,631.19
Stratford R.P.D.—Downie, Easthope N., Easthope S. and Ellice twps	46,127.09	191.6	667.04	1,107.96	2,244.50
Strathroy R.P.D.—Adelaide, Caradoc, Ekfrid, Lobo, Metcalfe and Williams E. twps	33,671.83	113.3	394.44	987.43	1,640.76
Streetsville R.P.D.—Chinguacousy, Esquesing, Toronto and Trafalgar twps	100,351.00	365.9	1,273.86	2,594.87	4,862.29
Tavistock R.P.D.—Easthope N., Easthope S., Ellice and Zorra E. twps	57,324.19	203.0	706.73	1,344.07	2,746.77
Thamesville R.P.D.—Camden, Chatham, Euphemia, Harwich, Howard, Orford and Zone twps	34,244.77	120.6	419.86	954.74	1,665.90
Tilbury R.P.D.—Dover, Mersea, Rochester, Romney, Tilbury E., Tilbury N. and Tilbury W. twps	56,445.03	190.7	663.91	1,466.49	2,745.76
Tillsonburg R.P.D.—Bayham, Dereham, Dorchester S., Houghton, Malahide, Middleton, Norwich N., Norwich S. and Walsingham N. twps	111,092.53	386.5	1,345.57	2,908.47	5,342.51
Wallaceburg R.P.D.—Chatham, Dover and Sombra twps	65,596.65	218.7	761.39	1,913.30	3,191.29
Walsingham R.P.D.—Charlotteville, Houghton, Middleton, Walsingham N., Walsingham S. and Windham twps.	102,850.79	294.0	1,023.54	2,164.23	4,983.23
Walton R.P.D.—Grey, Hullett, McKillop, Morris, Wawanosh E. and Wawanosh W. twps	41,592.22	112.3	390.96	981.24	2,023.76
Waterdown R.P.D.—Flamboro E., Flamboro W. and Nelson twps	287,241.95	1,081.7	3,765.87	6,355.36	14,215.77
Waterford R.P.D.—Townsend and Windham twps	61,369.99	241.6	841.11	1,410.81	2,986.71

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,199.25	891.51	2,964.90	2,702.91	143.12	30,678.65	30,678.65	see page 215
1,656.00	626.56	1,833.60	1,870.12	88.49	21,736.63	21,736.63	“
993.08	368.62	1,285.20	1,238.02	62.03	13,563.89	13,563.89	“
167.44	60.25	189.90	189.39	9.16	2,165.51	2,165.51	“
545.01	214.30	813.30	685.35	39.25	8,633.68	8,633.68	“
228.97	102.46	486.00	336.13	23.46	4,012.08	4,012.08	“
353.75	150.54	574.80	465.78	27.74	5,592.11	5,592.11	“
307.84	109.27	339.90	343.29	16.40	4,139.33	4,139.33	“
859.78	335.18	1,097.70	1,014.16	52.98	12,090.82	12,090.82	“
488.48	185.92	609.00	573.30	29.38	6,683.65	6,683.65	“
298.36	114.01	361.80	347.97	17.46	4,180.10	4,180.10	“
506.18	186.24	572.10	574.36	27.61	6,742.65	6,742.65	“
973.25	357.05	1,159.50	1,115.94	55.94	13,258.23	13,258.23	“
593.55	218.50	656.10	667.85	31.66	8,033.64	8,033.64	“
1,024.96	320.42	882.00	1,047.84	42.57	11,488.79	11,488.79	“
425.69	132.48	336.90	426.28	16.26	4,733.57	4,733.57	“
2,490.38	959.10	3,245.10	2,962.34	156.62	34,150.54	34,150.54	“
500.57	199.74	724.80	621.20	34.98	7,319.92	7,319.92	“

NIAGARA

Statement showing the amount chargeable (upon annual adjustment) to each it by the Commission; the amount received by the Commission or charged to each Municipality in respect of power

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operation, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Watford R.P.D.—Adelaide, Metcalfe and Warwick twps	9,604.43	25.8	89.82	263.83	467.66
Welland R.P.D.—Bertie, Crowland, Humberstone, Moulton, Pelham, Thorold, Wainfleet and Willoughby twps	273,263.01	1,242.7	4,326.38	7,715.23	13,290.56
Woodbridge R.P.D.—Albion, Chinguacousy, Etobicoke, King, Toronto, Toronto Gore, Vaughan and York N. twps	171,572.48	620.2	2,159.18	3,569.34	8,350.14
Woodstock R.P.D.—Blandford, Blenheim, Burford, Oxford E., Oxford N., Oxford W., Zorra E. and Zorra W. twps	157,874.55	631.5	2,198.52	3,793.01	7,679.48
Totals—Rural power districts	8,042,938.23	29,571.0	102,949.44	199,303.83	390,571.63
Totals—Municipalities	144,281,834.71	628,716.5	2,188,833.75	2,725,973.90	7,016,113.44
Totals—Rural power districts	8,042,938.23	29,571.0	102,949.44	199,303.83	390,571.63
Totals—Companies	46,206,189.49	230,240.1	801,565.52	987,366.14	2,250,363.25
Totals—Local distribution system	1,359,087.68	5,026.5	17,499.43	80,263.28	74,151.20
	199,890,050.11				
Non-operating capital	114,275.02				
Grand Totals	200,004,325.13	893,554.1	3,110,848.14	3,992,907.15	9,731,199.52

SYSTEM *N.—COST OF POWER*

Municipality as the Cost—under Power Commission Act—of Power supplied to from each Municipality, and the amount remaining to be credited supplied to it in the year ending October 31, 1936

costs and fixed charges				Cost in excess of revenue from power sold to private companies	Amounts charged to each municipality in respect of power supplied to it in the year	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality Credited (Charged)
Provision for depreciation and obsolescence	Provision for contingencies	Provision for stabilization of rates	Provision for sinking fund				
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
98.00	31.22	77.40	98.52	3.74	1,130.19	1,130.19	see page 215
2,003.78	844.04	3,728.10	2,746.79	179.94	34,834.82	34,834.82	"
1,479.95	540.39	1,860.60	1,742.49	89.81	19,791.90	19,791.90	"
1,266.56	529.72	1,894.50	1,596.16	91.44	19,049.39	19,049.39	"
68,174.71	25,934.28	88,713.00	81,445.20	4,281.71	961,373.80	961,373.80	....
1,008,885.68	436,998.25	1,874,886.60	1,452,912.15	90,494.49	16,795,098.26	17,111,479.86	348,724.62 (32,343.02)
68,174.71	25,934.28	88,713.00	81,445.20	4,281.71	961,373.80	961,373.80	....
294,195.92	135,315.97	....	488,121.14	(106,591.57)	4,850,336.37	4,850,336.37	....
13,131.81	6,025.99	....	11,416.28	11,815.37	214,303.36	214,303.36	....
1,384,388.12	604,274.49	1,963,599.60	2,033,894.77	....	22,821,111.79	23,137,493.39	348,724.62 (32,343.02)

NIAGARA SYSTEM—

Statement showing the costs of distribution of power within each Rural Power and the amounts remaining to be credited to certain Districts or charged (by annual adjustment) of the actual costs

Rural power district	Total capital cost of each district, Provincial Government grant received and applied thereagainst, and the balance representing the investment by the Commission			Cost of power delivered to districts as shown in "cost of power" table preceding	Cost of operation maintenance and administration
	Total capital cost	Government grant	Commission's investment		
	$ c.	$ c.	$ c.	$ c.	$ c.
Acton R.P.D.	17,663.98	8,831.99	8,831.99	345.09	527.99
Ailsa Craig R.P.D.	9,518.72	4,759.36	4,759.36	276.76	215.44
Alvinston R.P.D.	5,607.16	2,803.58	2,803.58	214.04	24.61
Amherstburg R.P.D.	157,532.35	78,680.67	78,851.68	21,100.23	4,492.78
Aylmer R.P.D.	*223,432.14	109,604.04	113,828.10	10,969.06	5,894.97
Ayr R.P.D.	*48,856.75	24,248.21	24,608.54	1,459.77	1,016.93
Baden R.P.D.	*208,561.18	103,668.41	104,892.77	13,450.32	5,182.87
Beamsville R.P.D.	400,646.59	194,366.72	206,279.87	36,534.25	14,557.66
Belle River R.P.D.	94,117.23	47,058.62	47,058.61	7,842.52	3,577.80
Blenheim R.P.D.	*120,351.70	58,878.33	61,473.37	5,478.39	3,512.47
Bond Lake R.P.D.	391,193.05	195,596.52	195,596.53	38,337.79	14,070.37
Bothwell R.P.D.	*66,766.38	32,719.14	34,047.24	7,980.73	2,917.05
Brampton R.P.D.	95,921.60	47,960.80	47,960.80	5,255.61	2,600.28
Brant R.P.D.	*261,603.75	129,582.45	132,021.30	17,127.36	5,706.70
Brigden R.P.D.	56,395.69	28,197.85	28,197.84	2,748.75	1,341.74
Burford R.P.D.	105,386.37	52,693.19	52,693.18	5,416.40	2,968.09
Caledonia R.P.D.	227,116.72	113,312.43	113,804.29	10,329.78	5,896.42
Chatham R.P.D.	278,589.06	138,993.35	139,595.71	15,181.06	9,399.29
Chippawa R.P.D.	67,306.96	33,650.60	33,656.36	2,836.08	2,839.76
Clinton R.P.D.	131,306.94	64,594.00	66,712.94	5,223.61	4,477.51
Delaware R.P.D.	*245,582.15	121,767.51	123,814.64	10,380.34	7,513.95
Dorchester R.P.D.	*222,973.53	110,277.79	112,695.74	11,202.72	6,662.88
Dresden R.P.D.	40,408.91	20,204.46	20,204.45	1,526.01	615.07
Drumbo R.P.D.	*112,142.51	55,285.47	56,857.04	4,082.01	3,332.05
Dundas R.P.D.	288,865.62	140,972.52	147,893.10	18,001.59	7,958.69
Dunnville R.P.D.	50,228.43	25,114.22	25,114.21	1,435.95	1,189.64
Dutton R.P.D.	*81,436.52	40,587.52	40,849.00	5,165.39	3,670.84
Elmira R.P.D.	37,865.24	18,932.62	18,932.62	2,967.85	1,114.12
Elora R.P.D.	93,770.35	46,666.27	47,104.08	3,810.52	3,223.95
Essex R.P.D.	*152,118.25	75,085.68	77,032.57	7,177.49	4,005.77
Exeter R.P.D.	*158,493.32	78,393.12	80,100.20	11,985.10	5,975.53
Forest R.P.D.	*77,685.21	37,908.75	39,776.46	1,997.26	1,656.66
Galt R.P.D.	86,110.69	43,055.35	43,055.34	7,020.79	4,245.92
Georgetown R.P.D.	110,848.01	55,424.01	55,424.00	4,882.86	3,390.42
Goderich R.P.D.	79,696.46	39,570.78	40,125.68	4,911.27	2,465.51
Grantham R.P.D.	149,235.28	72,237.64	76,997.64	17,240.12	8,561.63
Guelph R.P.D.	208,193.81	104,070.46	104,123.35	14,516.26	6,272.96
Haldimand R.P.D.	*153,541.29	74,556.76	78,984.53	8,909.35	4,550.83
Harriston R.P.D.	*33,889.60	16,664.64	17,224.96	762.53	1,293.68
Harrow R.P.D.	148,329.36	74,164.68	74,164.68	15,721.15	4,952.12
Ingersoll R.P.D.	305,585.66	152,792.83	152,792.83	14,986.07	8,315.95
Jordan R.P.D.	113,226.56	56,409.85	56,816.71	9,282.49	4,401.35
Keswick R.P.D.	190,008.65	92,426.88	97,581.77	20,829.97	6,983.54
Kingsville R.P.D.	*313,628.44	154,277.53	159,350.91	24,877.23	11,463.77
Listowel R.P.D.	125,549.51	62,774.76	62,774.75	6,605.97	5,254.42

Note—Items marked * include portions of transmission lines aggregating $49,191.24 used for purposes of rural power districts.

District, the revenue collected from (or charged to) customers within each District, to the Municipalities comprising certain other Districts upon ascertainment in the year ending October 31, 1936

Interest	Provision for depreciation and obsolescence	Sinking fund	Total cost	Revenue from power and light customers in each district	Amounts remaining to be credited to certain districts or charged to the municipalities comprising certain other districts	
					Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
400.43	288.06	86.66	1,648.23	1,686.44	38.21	
231.56	166.58	50.12	940.46	837.04		103.42
136.40	98.12	29.52	502.69	411.01		91.68
3,620.37	2,601.42	783.55	32,598.35	34,149.37	1,551.02	
5,274.29	3,720.27	1,141.51	27,000.10	31,343.71	4,343.61	
1,103.89	789.54	238.91	4,609.04	4,562.11		46.93
4,722.49	3,375.82	1,022.08	27,753.58	25,565.89		2,187.69
9,786.61	6,719.86	2,118.11	69,716.49	77,714.95	7,998.46	
2,176.90	1,566.01	471.15	15,634.38	15,825.71	191.33	
2,831.49	1,991.50	612.81	14,426.66	17,266.98	2,840.32	
9,220.18	6,632.78	1,995.52	70,256.64	74,929.82	4,673.18	
1,585.63	1,117.42	343.18	13,944.01	15,032.47	1,088.46	
2,106.80	1,515.58	455.97	11,934.24	10,141.61		1,792.63
6,269.43	4,467.41	1,356.89	34,927.79	34,130.24		797.55
1,358.44	977.23	294.01	6,720.17	5,778.07		942.10
2,509.73	1,805.44	543.18	13,242.84	13,018.43		224.41
5,345.51	3,836.83	1,156.93	26,565.47	27,594.93	1,029.46	
6,675.20	4,791.44	1,444.71	37,491.70	38,226.41	734.71	
1,562.00	1,123.57	338.07	8,699.48	8,103.31		596.17
3,219.81	2,279.20	696.87	15,897.00	15,345.97		551.03
5,957.96	4,250.19	1,289.47	29,391.91	31,266.53	1,874.62	
5,306.73	3,775.04	1,148.54	28,095.91	30,591.07	2,495.16	
964.49	693.83	208.74	4,008.14	4,255.60	247.46	
2,721.65	1,930.39	589.05	12,655.15	12,495.44		159.71
6,770.80	4,637.64	1,465.40	38,834.12	42,719.34	3,885.22	
1,157.91	832.97	250.60	4,867.07	3,965.10		901.97
1,912.21	1,371.03	413.86	12,533.33	10,411.29		2,122.04
911.01	655.36	197.17	5,845.51	5,871.28	25.77	
2,216.03	1,586.49	479.61	11,316.60	10,755.09		561.51
3,602.22	2,557.29	779.63	18,122.40	20,916.56	2,794.16	
3,839.77	2,732.37	831.04	25,363.81	27,794.80	2,430.99	
1,845.32	1,294.79	399.38	7,193.41	8,209.08	1,015.67	
2,082.00	1,497.74	450.61	15,297.06	13,519.17		1,777.89
2,643.29	1,901.52	572.09	13,390.18	12,346.36		1,043.82
1,922.94	1,373.95	416.18	11,089.85	9,221.40		1,868.45
3,674.27	2,476.58	795.22	32,747.82	34,320.37	1,572.55	
4,893.48	3,519.33	1,059.10	30,261.13	28,788.28		1,472.85
3,484.35	2,429.86	754.12	20,128.51	18,635.37		1,493.14
825.34	583.92	178.63	3,644.10	2,734.12		909.98
3,509.71	2,524.80	759.60	27,467.38	28,641.14	1,173.76	
7,378.87	5,308.18	1,597.00	37,586.07	34,333.80		3,252.27
2,744.27	1,967.04	593.94	18,989.09	18,990.69	1.60	
4,551.02	3,183.68	984.97	36,533.18	36,413.30		119.88
7,600.59	5,378.90	1,644.99	50,965.48	54,159.85	3,194.37	
3,036.48	2,184.38	657.18	17,738.43	15,952.37		1,786.06

Note—For townships included in rural power districts see "Cost of power" statement preceding.

NIAGARA SYSTEM—

Statement showing the costs of distribution of power within each Rural Power and the amounts remaining to be credited to certain Districts or charged (by annual adjustment) of the actual costs

Rural power district	Total capital cost of each district, Provincial Government grant received and applied thereagainst, and the balance representing the investment by the Commission			Cost of power delivered to districts as shown in "cost of power" table preceding	Cost of operation maintenance and administration
	Total capital cost	Government grant	Commission's investment		
	$ c.	$ c.	$ c.	$ c.	$ c.
London R.P.D.	*498,865.06	248,818.02	250,047.04	53,730.13	22,214.71
Lucan R.P.D.	*70,729.75	35,019.35	35,710.40	2,007.21	1,321.30
Lynden R.P.D.	112,372.12	55,743.61	56,628.51	6,018.10	3,124.20
Markham R.P.D.	*274,246.43	137,041.22	137,205.21	17,178.00	7,035.07
Merlin R.P.D.	154,423.03	77,211.51	77,211.52	8,042.00	2,834.51
Milton R.P.D.	133,804.80	66,902.40	66,902.40	6,249.27	3,139.84
Milverton R.P.D.	77,154.89	38,577.44	38,577.45	3,131.29	3,089.49
Mitchell R.P.D.	114,589.85	57,294.92	57,294.93	6,973.36	3,917.95
Newmarket R.P.D.	149,493.88	74,746.94	74,746.94	9,273.60	3,992.93
Niagara R.P.D.	*136,436.50	67,893.88	68,542.62	12,962.90	5,365.73
Norwich R.P.D.	*221,045.34	108,184.14	112,861.20	10,304.56	5,799.10
Oil Springs R.P.D.	30,477.32	15,238.66	15,238.66	1,630.73	1,310.76
Palmerston R.P.D.	*64,454.55	31,760.36	32,694.19	1,972.18	1,948.09
Petrolia R.P.D.	*32,308.20	15,600.73	16,707.47	1,103.33	1,244.77
Preston R.P.D.	*365,941.28	181,805.39	184,135.89	26,468.01	9,821.06
Ridgetown R.P.D.	213,691.95	106,845.98	106,845.97	12,342.37	5,994.41
St. Jacobs R.P.D.	114,617.32	57,022.93	57,594.39	7,374.79	4,486.08
St. Marys R.P.D.	216,903.50	108,451.75	108,451.75	9,462.16	5,101.27
St. Thomas R.P.D.	335,766.34	166,838.65	168,927.69	21,474.21	12,430.72
Saltfleet R.P.D.	334,413.60	164,362.17	170,051.43	31,279.62	13,007 59
Sandwich R.P.D.	352,785.90	176,388.04	176,397.86	30,678.65	18,508.16
Sarnia R.P.D.	*233,028.79	114,408.29	118,620.50	21,736.63	11,207.28
Scarboro R.P.D.	235,570.45	117,785.23	117,785.22	13,563.89	6,131.26
Seaforth R.P.D.	31,865.96	15,315.04	16,550.92	2,165.51	1,863.78
Simcoe R.P.D.	155,668.24	77,663.83	78,004.41	8,633.68	4,022.76
Stamford R.P.D.	41,504.93	20,752.47	20,752.46	4,012.08	3,750.64
Stratford R.P.D.	68,226.49	33,852.39	34,374.10	5,592.11	2,866.43
Strathroy R.P.D.	113,172.90	56,409.67	56,763.23	4,139.33	2,067.40
Streetsville R.P.D.	201,038.55	100,519.27	100,519.28	12,090.82	5,033.99
Tavistock R.P.D.	150,480.27	75,219.56	75,260.71	6,683.65	5,257.27
Thamesville R.P.D.	112,815.56	56,156.29	56,659.27	4,180.10	3,171.58
Tilbury R.P.D.	*154,204.12	76,302.72	77,901.40	6,742.65	2,936.73
Tillsonburg R.P.D.	242,552.77	121,276.38	121,276.39	13,258.23	5,521.79
Wallaceburg R.P.D.	183,888.81	91,560.43	92,328.38	8,033.64	5,827.42
Walsingham R.P.D.	264,425.69	132,212.84	132,212.85	11,488.79	6,170.89
Walton R.P.D.	*88,210.18	42,423.16	45,787.02	4,733.57	3,457.16
Waterdown R.P.D.	260,333.71	119,813.70	140,520.01	34,150.54	9,565.73
Waterford R.P.D.	134,026.61	67,013.30	67,013.31	7,319.92	3,124.83
Watford R.P.D.	24,125.04	12,062.52	12,062.52	1,130.19	772.64
Welland R.P.D.	700,513.82	345,867.18	354,646.64	34,834.82	21,936.15
Woodbridge R.P.D.	*403,887.47	201,100.87	202,786.60	19,791.90	9,446.88
Woodstock R.P.D.	252,432.19	126,216.10	126,216.09	19,049.39	8,224.10
Total capital	14,603,781.84	7,235,501.69	7,368,280.15	....	....
Non-operating capital	74,000.59	36,955.81	37,044.78	....	....
Grand totals	14,677,782.43	7,272,457.50	7,405,324.93	961,373.80	468,336.43

Note—Items marked * include portions of transmission lines aggregating $49,191.24 used for purposes of rural power districts.

RURAL POWER DISTRICTS *N.—RURAL OPERATING*

District, the revenue collected from (or charged to) customers within each District, to the Municipalities comprising certain other Districts upon ascertainment in the year ending October 31, 1936

Interest	Provision for depreciation and obsolescence	Sinking fund	Total cost	Revenue from power and light customers in each district	Amounts remaining to be credited to certain districts or charged to the municipalities comprising certain other districts	
					Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
11,901.73	8,540.33	2,575.89	98,962.79	103,317.92	4,355.13	....
1,726.65	1,230.01	373.70	6,658.87	6,869.02	210.15	....
2,656.46	1,895.51	574.94	14,269.21	13,319.43	....	949.78
6,458.83	4,643.46	1,397.89	36,713.25	40,856.90	4,143.65	....
3,706.94	2,666.68	802.29	18,052.42	18,250.93	198.51	....
3,146.60	2,263.59	681.02	15,480.32	16,098.96	618.64	....
1,796.82	1,292.59	388.89	9,699.08	8,325.59	....	1,373.49
2,757.61	1,983.76	596.83	16,229.51	16,563.73	334.22	....
3,441.47	2,475.71	744.84	19,928.55	21,168.49	1,239.94	....
3,300.51	2,362.95	714.33	24,706.42	27,080.99	2,374.57	....
5,041.56	3,544.93	1,091.14	25,781.29	27,200.82	1,419.53	....
736.06	529.51	159.31	4,366.37	5,056.41	690.04	....
1,545.54	1,095.48	334.50	6,895.79	5,127.75	....	1,768.04
763.54	529.91	165.25	3,806.80	3,849.48	42.68	....
8,767.84	6,266.59	1,897.62	53,221.12	57,097.13	3,876.01	....
5,132.63	3,692.29	1,110.85	28,272.55	29,034.31	761.76	....
2,769.28	1,982.15	599.36	17,211.66	17,001.05	....	210.61
5,160.67	3,712.46	1,116.92	24,553.48	21,795.38	....	2,758.10
8,033.05	5,744.23	1,738.60	49,420.81	47,913.45	....	1,507.36
7,835.55	5,446.28	1,695.85	59,264.89	66,834.28	7,569.39	....
8,493.68	6,109.97	1,838.28	65,628.74	72,994.39	7,365.65	....
5,626.77	3,974.05	1,217.79	43,762.52	45,915.59	2,153.07	....
5,502.91	3,958.67	1,190.99	30,347.72	36,815.56	6,467.84	....
803.01	556.04	173.79	5,562.13	5,086.23	....	475.90
3,599.45	2,583.40	779.03	19,618.32	21,035.35	1,417.03	....
1,006.54	724.08	217.84	9,711.18	11,915.46	2,204.28	....
1,652.61	1,179.72	357.67	11,648.54	11,569.99	....	78.55
2,640.57	1,893.38	571.49	11,312.17	11,420.13	107.96	....
4,819.66	3,467.15	1,043.12	26,454.74	26,253.57	....	201.17
3,504.66	2,520.45	758.51	18,724.54	17,130.74	....	1,593.80
2,716.26	1,945.21	587.88	12,601.03	13,119.53	518.50	....
3,412.09	2,426.61	738.48	16,256.56	18,035.82	1,779.26	....
5,569.58	4,006.63	1,205.42	29,561.65	30,272.09	710.44	....
4,303.43	3,082.35	931.39	22,178.23	23,666.62	1,488.39	....
5,984.41	4,305.04	1,295.20	29,244.33	32,128.99	2,884.66	....
2,185.31	1,513.20	472.97	12,362.21	12,159.01	....	203.20
6,805.06	4,176.04	1,472.82	56,170.19	57,010.44	840.25	....
3,171.14	2,281.24	686.33	16,583.46	17,960.27	1,376.81	....
586.86	422.17	127.01	3,038.87	2,879.96	....	158.91
16,928.44	11,940 90	3,663.81	89,304.12	105,020.56	15,716.44	....
9,569.43	6,855.68	2,071.10	47,734.99	54,763.10	7,028.11	....
5,924.86	4,262.20	1,282.31	38,742.86	38,633.63	....	109.23
....	....	....	....	....	....	....
....	....	....	....	....	....	....
347,175.94	246,593.95	75,139.12	2,098,619.24	2,187,520.92	125,093.00	36,191.32

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

NIAGARA

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Acton	Jan. 1913	2,554.82			2,554.82
Agincourt	Nov. 1922	480.97			480.97
Ailsa Craig	Jan. 1916	432.78			432.78
Alvinston	April 1922	4,120.87			4,120.87
Amherstburg	Nov. 1925	1,261.25			1,261.25
Ancaster twp	May 1923		119.04	119.04	
Arkona	Dec. 1926	352.96			352.96
Aylmer	Mar. 1918	1,290.00			1,290.00
Ayr	Jan. 1915	591.90			591.90
Baden	May 1912	178.93			178.93
Beachville	Aug. 1912	612.82			612.82
Belle River	Dec. 1922	269.03			269.03
Blenheim	Nov. 1915	683.93			683.93
Blyth	July 1924	534.27			534.27
Bolton	Feb. 1915	394.22			394.22
Bothwell	Sept. 1915	280.48			280.48
Brampton	Nov. 1911	3,191.39			3,191.39
Brantford	Feb. 1914		3,830.26	3,830.26	
Brantford twp	May 1924	428.40			428.40
Bridgeport	Mar. 1928	183.53			183.53
Brigden	Jan. 1918	346.81			346.81
Brussels	July 1924	707.71			707.71
Burford	June 1915	183.62			183.62
Burgessville	Nov. 1916	49.11			49.11
Caledonia	Oct. 1912	416.94			416.94
Campbellville	Jan. 1925	74.74			74.74
Cayuga	Nov. 1924	54.54		9.30	63.84
Chatham	Feb. 1915	3,791.78			3,791.78
Chippawa	Sept. 1919		239.48	239.48	
Clifford	May 1924	433.80			433.80
Clinton	Mar. 1914	716.20			716.20
Comber	May 1915	935.10			935.10
Cottam	Nov. 1926	86.26		2.01	88.27
Courtright	Dec. 1923	311.73			311.73
Dashwood	Sept. 1917.	470.14			470.14
Delaware	Mar. 1915		89.33	89.33	
Dorchester	Dec. 1914	255.85			255.85
Drayton	Mar. 1918	636.75			636.75
Dresden	April 1915	1,085.75			1,085.75
Drumbo	Dec. 1914	324.16			324.16
Dublin	Oct. 1917		630.51		
Dundas	Jan. 1911	1,144.80			1,144.80
Dunnville	June 1918	2,002.55			2,002.55
Dutton	Sept. 1915	410.00			410.00
East Windsor	Nov. 1922	1,872.49			1,872.49

SYSTEM *N.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
39.65		1,249.48		1,289.13	
7.62		437.17		444.79	
8.41		365.89		374.30	
48.37		353.71		402.08	
19.99		2,725.12		2,745.11	
	2.15	166.45		164.30	
6.54		10.05		16.59	
21.43		1,283.20		1,304.63	
10.54		373.91		384.45	
2.89		485.76		488.65	
11.25		529.61		540.86	
4.94		434.77		439.71	
10.91		897.84		908.75	
10.30		454.25		464.55	
6.07		494.69		500.76	
5.30		144.65		149.95	
53.02		4,373.62		4,426.64	
	61.95	196.99		135.04	
6.88		820.36		827.24	
3.07		362.54		365.61	
6.06		260.15		266.21	
13.73		518.87		532.60	
3.47		204.11		207.58	
0.82		118.35		119.17	
7.02		815.29		822.31	
1.37		99.96		101.33	
1.05		205.60		206.65	
69.62		5,699.02		5,768.64	
	3.95	136.57		132.62	
7.60		365.79		373.39	
11.90		878.44		890.34	
15.89		390.81		406.70	
1.36		215.86		217.22	
5.80			73.88		68.08
8.28		483.50		491.78	
	1.44	184.37		182.93	
4.31		354.33		358.64	
11.25		416.13		427.38	
18.97		774.63		793.60	
5.74		153.47		159.21	
	25.22	66.01			589.72
18.14		2,379.38		2,397.52	
31.73		934.42		966.15	
7.17		593.17		600.34	
30.90		542.02		572.92	

NIAGARA

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Elmira	Nov. 1913	2,164.11			2,164.11
Elora	Nov. 1914	534.07			534.07
Embro	Jan. 1915	461.95			461.95
Erieau	July 1924	504.59			504.59
Erie Beach	July 1925	132.67			132.67
Essex	Nov. 1923	599.65			599.65
Etobicoke twp	Aug. 1917		5.62	5.62	
Exeter	June 1916	897.61			897.61
Fergus	Nov. 1914	2,951.54			2,951.54
Fonthill	June 1926	281.11			281.11
Forest	Mar. 1917	1,439.18			1,439.18
Galt	May 1911		4,109.14	4,109.14	
Georgetown	Sept. 1913	3,503.34			3,503.34
Glencoe	Aug. 1920	935.16			935.16
Goderich	Feb. 1914	341.25			341.25
Granton	July 1916	57.89			57.89
Guelph	Dec. 1910	5,112.16			5,112.16
Hagersville	Sept. 1913	200.03			200.03
Hamilton	Feb. 1911		40,744.47	40,744.47	
Harriston	July 1916	1,133.87			1,133.87
Harrow	Nov. 1923	797.35			797.35
Hensall	Jan. 1917	1,053.45		0.57	1,054.02
Hespeler	Feb. 1911	1,755.42			1,755.42
Highgate	Dec. 1916.	159.61			159.61
Humberstone	Oct. 1924	280.09			280.09
Ingersoll	May 1911		6,747.05	3,034.23	
Jarvis	Feb. 1924		79.24	79.24	
Kingsville	Nov. 1923	397.65			397.65
Kitchener	Jan. 1911		3,947.60	3,947.60	
Lambeth	April 1915	128.09			128.09
LaSalle	Nov. 1925		92.65	92.65	
Leamington	Nov. 1923	336.83			336.83
Listowel	June 1916	1,952.45			1,952.45
London	Jan. 1911		25,628.50	25,628.50	
London Railway Commission	Aug. 1914		5,380.00	5,380.00	
London twp	Jan. 1925	511.78			511.78
Long Branch	Jan. 1931	1,022.99			1,022.99
Lucan	Feb. 1915	251.60			251.60
Lynden	Nov. 1915	613.10			613.10
Markham	April 1920	2,019.54			2,019.54
Merlin	Dec. 1922	503.92			503.92
Merritton	Nov. 1920		2,703.44	2,703.44	
Milton	April 1913	53.47		2.34	55.81
Milverton	June 1916	358.46			358.46
Mimico	May 1912		1,164.96	1,164.96	

SYSTEM *N.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments
or Charged to each Municipality in respect of power supplied in the year
as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
38.10		2,764.02		2,802.12	
8.29		285.89		294.18	
8.26		600.66		608.92	
8.94		415.36		424.30	
2.58		99.52		102.10	
11.01		781.21		792.22	
	0.09	4,131.79		4,131.70	
14.91		1,109.47		1,124.38	
51.88		3,425.38		3,477.26	
3.75		212.21		215.96	
23.18		577.02		600.20	
	68.71		1,976.55		2,045.26
61.35		2,561.17		2,622.52	
15.68		904.52		920.20	
5.89		2,772.17		2,778.06	
1.00		472.81		473.81	
84.92		9,122.53		9,207.45	
3.67		545.42		549.09	
7.00	630.41	20,946.13		20,322.72	
17.54		984.88		1,002.42	
13.42		1,247.32		1,260.74	
21.38		703.71		725.09	
32.23		2,710.61		2,742.84	
2.51		214.29		216.80	
4.71		506.56		511.27	
	235.48		668.44		4,616.74
	1.32	71.77		70.45	
7.52		1,330.68		1,338.20	
	66.01	4,778.08		4,712.07	
2.35		99.72		102.07	
	1.53	426.83		425.30	
5.71		2,843.20		2,848.91	
35.85		2,193.83		2,229.68	
	425.74	35,244.58		34,818.84	
	119.95		4,213.03		4,332.98
8.50		1,394.32		1,402.82	
16.99		1,284.22		1,301.21	
4.76		358.49		363.25	
12.87		315.53		328.40	
42.83		611.79		654.62	
9.72		593.49		603.21	
	46.63	4,429.47		4,382.84	
0.98		1,360.36		1,361.34	
5.99		280.03		286.02	
	23.17	546.11		522.94	

NIAGARA

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Mitchell	Sept. 1911		474.18	474.18	
Moorefield	Mar. 1918	142.89			142.89
Mount Brydges	Mar. 1915	240.30			240.30
Newbury	Mar. 1921	197.07			197.07
New Hamburg	Mar. 1911	60.39			60.39
New Toronto	Feb. 1914	9,983.95			9,983.95
Niagara Falls	Dec. 1915		48,673.09	48,684.67	11.58
Niagara-on-the-Lake	Aug. 1919	528.69			528.69
Norwich	May 1912	271.36			271.36
Oil Springs	Feb. 1918	514.70			514.70
Otterville	Feb. 1916	408.17			408.17
Palmerston	July 1916	1,109.99			1,109.99
Paris	Feb. 1914		579.83	579.83	
Parkhill	May 1920	900.53			900.53
Petrolia	May 1916	2,785.66			2,785.66
Plattsville	Dec. 1914	541.07			541.07
Point Edward	Nov. 1916	4,806.33			4,806.33
Port Colborne	Mar. 1920	1,317.03			1,317.03
Port Credit	Aug. 1912	528.65			528.65
Port Dalhousie	Nov. 1912	289.31			289.31
Port Dover	Dec. 1921	1,378.28			1,378.28
Port Rowan	Nov. 1926	879.93			879.93
Port Stanley	April 1912	1,809.56			1,809.56
Preston	Jan. 1911		1,428.07	1,428.07	
Princeton	Jan. 1915	910.76			910.76
Queenston	Mar. 1921	149.64			149.64
Richmond Hill	June 1925	482.49			482.49
Ridgetown	Dec. 1915	548.29			548.29
Riverside	Nov. 1922	1,152.39			1,152.39
Rockwood	Sept. 1913	475.01			475.01
Rodney	Feb. 1917		71.15	71.15	
St. Catharines	April 1914		6,093.46	6,093.46	
St. Clair Beach	Nov. 1922	228.60			228.60
St. George	Sept. 1915	963.47			963.47
St. Jacobs	Sept. 1917	185.13		1.89	187.02
St. Marys	May 1911	2,268.22			2,268.22
St. Thomas	April 1911		1,392.53	1,392.53	
Sandwich	Feb. 1924	1,015.37		15.15	1,030.52
Sarnia	Dec. 1916	14,780.20			14,780.20
Scarboro twp	Aug. 1918	3,704.13			3,704.13
Seaforth	Nov. 1911	434.16			434.16
Simcoe	Aug. 1915	2,122.28			2,122.28
Springfield	Aug. 1917	376.54		3.97	380.51
Stamford twp	Nov. 1916		8,143.82	1,952.18	
Stouffville	Sept. 1923	672.55			672.55

SYSTEM *N.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	7.60	767.61		760.01	
2.40		314.04		316.44	
4.15		296.19		300.34	
3.32		195.21		198.53	
0.98		1,218.99		1,219.97	
161.49		10,826.03		10,987.52	
	816.79		20,296.26		21,113.05
8.20		832.04		840.24	
4.36		559.95		564.31	
8.55		671.32		679.87	
8.01		411.84		419.85	
17.59		1,015.73		1,033.32	
	10.52	438.56		428.04	
15.75		762.78		778.53	
51.45		2,783.57		2,835.02	
9.95		232.99		242.94	
69.97		3,560.81		3,630.78	
21.73		2,136.55		2,158.28	
8.78		1,229.50		1,238.28	
4.81		1,255.51		1,260.32	
24.51		799.14		823.65	
11.73		530.73		542.46	
39.29		1,124.70		1,163.99	
	23.57		155.94		179.51
16.29		302.13		318.42	
2.52		96.61		99.13	
8.91		669.13		678.04	
8.45		654.98		663.43	
19.02		817.26		836.28	
7.83			3.21	4.62	
	1.21	34.28		33.07	
	109.88	1,482.09		1,372.21	
3.77		66.19		69.96	
16.38		588.94		605.32	
3.51		690.92		694.43	
36.44		3,199.01		3,235.45	
	23.13	7,585.96		7,562.83	
23.63		195.55		219.18	
243.91		9,926.58		10,170.49	
61.53		6,535.82		6,597.35	
7.97		812.83		820.80	
28.30		2,810.65		2,838.95	
7.47		114.24		121.71	
	267.93		1,255.98		7,715.55
12.53		488.88		501.41	

NIAGARA

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Stratford	Jan. 1911	4,898.77			4,898.77
Strathroy	Dec. 1914	2,762.74			2,762.74
Streetsville	Dec. 1934	164.27			164.27
Sutton	Aug. 1923	1,350.58			1,350.58
Tavistock	Nov. 1916	1,670.20			1,670.20
Tecumseh	Nov. 1922	933.42			933.42
Thamesford	Feb. 1914	340.91			340.91
Thamesville	Oct. 1915	752.46			752.46
Thedford	May 1922	435.62			435.62
Thorndale	Mar. 1914	267.05		1.30	268.35
Thorold	Jan. 1921		218.10	218.10	
Tilbury	April 1915	1,233.83			1,233.83
Tillsonburg	Aug. 1911	789.60			789.60
Toronto	June 1911		85,858.38	85,858.38	
Toronto twp.	Aug. 1913	1,390.33			1,390.33
Trafalgar twp.	Mar. 1929		1,476.57		
Walkerville	Nov. 1914		8,119.84	8,119.84	
Wallaceburg	Feb. 1915	4,197.98			4,197.98
Wardsville	June 1921	122.32			122.32
Waterdown	Nov. 1911		27.19	27.19	
Waterford	April 1915	467.17			467.17
Waterloo	Dec. 1910		3,559.76	3,559.76	
Watford	Sept. 1917	1,861.73			1,861.73
Welland	Sept. 1917		2,926.86	2,926.86	
Wellesley	Nov. 1916	422.92			422.92
West Lorne	Jan. 1917		86.66	86.66	
Weston	Jan. 1911		71.07	71.07	
Wheatley	Feb. 1924	360.01		103.35	463.36
Windsor	Oct. 1914		17,036.02	17,036.02	
Woodbridge	Dec. 1914	1,074.06			1,074.06
Woodstock	Jan. 1911		1,368.64	1,368.64	
Wyoming	Nov. 1916	319.14			319.14
York East twp.	July 1925	371.68			371.68
York North twp.	Nov. 1923		358.49	358.49	
Zurich	Sept. 1917	582.62			582.62
Mimico Asylum	Sept. 1913	316.35			316.35
Ontario Reformatory	Sept. 1913	334.28			334.28
Prison Brick Yard			30.82	30.82	
Toronto Transportation Commission	Jan. 1927	1,239.98			1,239.98
Totals—Municipalities		155,422.47	283,505.82	271,645.74	155,573.93
RURAL POWER DISTRICTS*					
Acton R.P.D.	Feb. 1928		408.29		10.00
Ailsa Craig R.P.D.	Sept. 1930		307.30	25.00	
Alvinston R.P.D.	June 1929		622.23		5.00

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*For townships included in rural power districts see "Cost of Power" statement preceding.

SYSTEM *N.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
77.63		9,010.46		9,088.09	
48.21		3,039.83		3,088.04	
3.02		484.90		487.92	
24.99		1,026.72		1,051.71	
27.16		1,362.69		1,389.85	
15.40		47.55		62.95	
5.81		637.44		643.25	
13.36		717.47		730.83	
8.01		347.52		355.53	
5.18		178.84		184.02	
	4.00	1,381.30		1,377.30	
19.15		1,077.01		1,096.16	
13.29		1,264.52		1,277.81	
	1,398.13	40,898.66		39,500.53	
22.34		2,200.87		2,223.21	
	59.06		2,061.57		3,597.20
	134.00	774.06		640.06	
77.08		1,867.30		1,944.38	
2.09		229.62		231.71	
	0.45	507.76		507.31	
7.35		679.87		687.22	
	56.41		674.29		730.70
31.88		568.25		600.13	
	68.45		897.46		965.91
7.59		402.90		410.49	
	1.56	22.05		20.49	
	1.55	3,159.21		3,157.66	
9.86		512.36		522.22	
	283.00	45,513.11		45,230.11	
18.73		1,222.28		1,241.01	
	21.24	883.60		862.36	
5.93		140.39		146.32	
6.05		4,263.71		4,269.76	
	5.64	2,788.24		2,782.60	
10.15		562.10		572.25	
5.84		292.87		298.71	
6.32		326.07		332.39	
	0.51		66.41		66.92
23.35		2,089.79		2,113.14	
2,636.88	5,008.38	348,724.62	32,343.02	348,020.18	46,021.62
	16.73	38.21			396.81
	11.29		103.42		397.01
	25.09		91.68		744.00

NIAGARA

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Rural Power District*	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Amherstburg R.P.D.	Nov. 1923	37,291.28			
Aylmer R.P.D.	Nov. 1922	21,296.13		100.00	
Ayr R.P.D.	July 1926		1,705.79		20.27
Baden R.P.D.	Sept. 1922		5,581.21		15.00
Beamsville R.P.D.	Jan. 1923	56,876.16		55.00	
Belle River R.P.D.	Dec. 1922	38,942.82		415.00	
Blenheim R.P.D.	July 1924	25,153.89		105.00	
Bond Lake R.P.D.	Mar. 1924	61,579.97		324.00	
Bothwell R.P.D.	Dec. 1923	6,300.03		60.00	
Brampton R.P.D.	Nov. 1923		4,013.48		25.00
Brant R.P.D.	Oct. 1922		6,324.77	250.00	
Brigden R.P.D.	Jan. 1927		3,968.45	60.00	
Burford R.P.D.	Dec. 1926	2,009.44			10.00
Caledonia R.P.D.	Oct. 1925		2,289.57	15.00	
Chatham R.P.D.	May 1922	21,916.72			125.00
Chippawa R.P.D.	July 1922	2,894.61			140.00
Clinton R.P.D.	July 1928		3,212.05	180.00	
Delaware R.P.D.	Oct. 1922	5,021.08		60.00	
Dorchester R.P.D.	Dec. 1921	1,854.39			140.00
Dresden R.P.D.	May 1928		786.67	10.00	
Drumbo R.P.D.	Aug. 1922		2,804.00	238.00	65.00
Dundas R.P.D.	Jan. 1922	25,803.93			140.00
Dunnville R.P.D.	July 1928		5,241.15		30.00
Dutton R.P.D.	Feb. 1926		4,622.69		215.00
Elmira R.P.D.	June 1926		2,651.62		50.00
Elora R.P.D.	Jan. 1926		4,002.74	130.00	
Essex R.P.D.	Nov. 1924	27,464.38		110.00	
Exeter R.P.D.	Nov. 1922	14,981.37			100.00
Forest R.P.D.	Nov. 1926		102.27		75.00
Galt R.P.D.	Oct. 1922	760.53		55.00	
Georgetown R.P.D.	Nov. 1924		1,940.31	90.00	
Goderich R.P.D.	June 1925		6,654.43		45.00
Grantham R.P.D.	Nov. 1924		1,107.42	85.00	70.00
Guelph R.P.D.	Jan. 1925		9,972.88	65.00	
Haldimand R.P.D.	Oct. 1925		7,556.25	45.00	
Harriston R.P.D.	Dec. 1929		2,695.19	65.00	
Harrow R.P.D.	Nov. 1923	27,838.29		390.00	
Ingersoll R.P.D.	Oct. 1922		7,919.56		40.00
Jordan R.P.D.	May 1922	8,983.95		130.00	
Keswick R.P.D.	Mar. 1924		17,690.06		20.00
Kingsville R.P.D.	Nov. 1923	47,875.14		40.00	88.15
Listowel R.P.D.	Oct. 1926		3,356.47		120.00
London R.P.D.	Nov. 1922	17,136.74			115.00

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*For townships included in rural power districts see "Cost of Power" statement preceding.

SYSTEM *N.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,491.65		1,551.02		40,333.95	
855.85		4,343.61		26,595.59	
	69.04		46.93		1,842.03
	223.85		2,187.69		8,007.75
2,277.25		7,998.46		67,206.87	
1,574.31		191.33		41,123.46	
1,010.36		2,840.32		29,109.57	
2,476.16		4,673.18		69,053.31	
254.40		1,088.46		7,702.89	
	161.54		1,792.63		5,992.65
	242.99		797.55		7,115.31
	156.34		942.10		5,006.89
79.98			224.41	1,855.01	
	90.98	1,029.46			1,336.09
871.67		734.71		23,398.10	
110.18			596.17	2,268.62	
	121.28		551.03		3,704.36
203.24		1,874.62		7,158.94	
68.58		2,495.16		4,278.13	
	31.07	247.46			560.28
	107.64		159.71		2,898.35
1,026.56		3,885.22		30,575.71	
	210.85		901.97		6,383.97
	193.51		2,122.04		7,153.24
	108.06	25.77			2,783.91
	154.91		561.51		4,589.16
1,102.98		2,794.16		31,471.52	
595.25		2,430.99		17,907.61	
	7.09	1,015.67		831.31	
32.62			1,777.89		929.74
	74.01		1,043.82		2,968.14
	267.98		1,868.45		8,835.86
	43.70	1,572.55		436.43	
	396.32		1,472.85		11,777.05
	300.45		1,493.14		9,304.84
	105.21		909.98		3,645.38
1,129.13		1,173.76		30,531.18	
	318.38		3,252.27		11,530.21
364.56		1.60		9,480.11	
	708.40		119.88		18,538.34
1,913.08		3,194.37		52,934.44	
	139.06		1,786.06		5,401.59
680.87		4,355.13		22,057.74	

NIAGARA

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Rural Power District*	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Lucan R.P.D.	June 1926		189.72		130.00
Lynden R.P.D.	Feb. 1922		2,806.26		20.00
Markham R.P.D.	Dec. 1922	44,807.16			375.00
Merlin R.P.D.	Nov. 1928		1,921.16		360.00
Milton R.P.D.	Jan. 1925	3,880.21		40.00	
Milverton R.P.D.	Aug. 1927		5,514.40	40.00	
Mitchell R.P.D.	Dec. 1925	1,599.16			10.00
Newmarket R.P.D.	Mar. 1924	7,071.01			15.00
Niagara R.P.D.	Jan. 1922	24,363.14		140.00	
Norwich R.P.D.	May 1925	4,450.33		15.00	
Oil Springs R.P.D.	Dec. 1925	4,026.02			15.00
Palmerston R.P.D.	Oct. 1926		6,452.13		50.00
Petrolia R.P.D.	Aug. 1923		111.18		10.00
Preston R.P.D.	April 1922	6,865.60			90.00
Ridgetown R.P.D.	Mar. 1922	304.97		340.00	
St. Jacobs R.P.D.	Nov. 1922		2,560.47	50.00	
St. Marys R.P.D.	Dec. 1927		6,586.24	60.00	
St. Thomas R.P.D.	Aug. 1923	18,798.12			75.00
Saltfleet R.P.D.	Feb. 1922	16,603.44		105.00	47.64
Sandwich R.P.D.	July 1922	65,519.45		355.00	
Sarnia R.P.D.	June 1923	25,156.33		315.00	
Scarboro R.P.D.	Dec. 1923	48,216.54			35.00
Seaforth R.P.D.	Nov. 1927		1,811.46	55.00	
Simcoe R.P.D.	Nov. 1922	2,188.83		110.00	
Stamford R.P.D.	Mar. 1922	8,276.98			170.00
Stratford R.P.D.	July 1924		1,301.80	20.00	
Strathroy R.P.D.	Dec. 1926		910.35		55.00
Streetsville R.P.D.	Nov. 1922	6,464.43			10.00
Tavistock R.P.D.	April 1923		1,688.70	150.00	
Thamesville R.P.D.	Nov. 1927		254.58	140.00	
Tilbury R.P.D.	Dec. 1923	7,763.54		307.50	58.50
Tillsonburg R.P.D.	Dec. 1923	2,101.64		175.00	
Wallaceburg R.P.D.	Jan. 1923	9,845.07		25.00	
Walsingham R.P.D.	Dec. 1926	7,079.25		130.00	
Walton R.P.D.	Nov. 1924	1,366.42		5.00	
Waterdown R.P.D.	Oct. 1922	52,475.71			90.00
Waterford R.P.D.	Nov. 1923	1,326.36			130.00
Watford R.P.D.	Dec. 1929	256.43			5.00
Welland R.P.D.	April 1922	34,541.92			460.00
Woodbridge R.P.D.	Jan. 1923	22,318.29			55.00
Woodstock R.P.D.	Feb. 1922	7,722.00			10.00
Totals—Rural power districts		887,369.20	139,645.30	5,679.50	3,939.56
Totals—Municipalities		155,422.47	283,505.82	271,645.74	155,573.93
Grand totals		1,042,791.67	423,151.12	277,325.24	159,513.49

*For townships included in rural power districts see "Cost of Power" statement preceding.

SYSTEM *N.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	12.79	210.15			122.36
	113.05		949.78		3,889.09
1,777.29		4,143.65		50,353.10	
	91.25	198.51			2,173.90
156.81		618.64		4,695.66	
	218.98		1,373.49		7,066.87
63.57		334.22		1,986.95	
282.24		1,239.94		8,578.19	
980.13		2,374.57		27,857.84	
178.61		1,419.53		6,063.47	
160.44		690.04		4,861.50	
	260.09		1,768.04		8,530.26
	4.85	42.68			83.35
271.02		3,876.01		10,922.63	
25.80		761.76		1,432.53	
	100.42		210.61		2,821.50
	261.05		2,758.10		9,545.39
748.92			1,507.36	17,964.68	
667.38		7,569.39		24,897.57	
2,634.98		7,365.65		75,875.08	
1,018.85		2,153.07		28,643.25	
1,927.26		6,467.84		56,576.64	
	70.26		475.90		2,302.62
91.95		1,417.03		3,807.81	
324.28		2,204.28		10,635.54	
	51.27		78.55		1,411.62
	38.61	107.96			896.00
258.18			201.17	6,511.44	
	61.55		1,593.80		3,194.05
	4.58	518.50		399.34	
316.80		1,779.26		10,108.60	
91.07		710.44		3,078.15	
394.80		1,488.39		11,753.26	
288.37		2,884.66		10,382.28	
54.86			203.20	1,223.08	
2,095.43		840.25		55,321.39	
47.85		1,376.81		2,621.02	
10.06			158.91	102.58	
1,363.28		15,716.44		51,161.64	
890.53		7,028.11		30,181.93	
308.48			109.23	7,911.25	
35,547.92	5,574.52	125,093.00	36,191.32	1,042,218.89	173,879.97
2,636.88	5,008.38	348,724.62	32,343.02	348,020.18	46,021.62
38,184.80	10,582.90	473,817.62	68,534.34	1,390,239.07	219,901.59

NIAGARA SYSTEM *SINKING FUND*

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder, as part of the cost of power delivered thereto, together with its proportionate share of other sinking funds provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Municipality	Period of years ending Oct. 31, 1936	Amount	Municipality	Period of years ending Oct. 31, 1936	Amount
		$ c.			$ c.
Acton	19 years	50,320.80	Elmira	18 years	59,958.23
Agincourt	12 “	7,690.58	Elora	17 “	28,736.50
Ailsa Craig	16 “	12,033.18	Embro	17 “	8,574.82
Alvinston	13 “	11,845.69	Erieau	13 “	4,406.97
Amherstburg	19 “	38,344.90	Erie Beach	12 “	1,085.78
Ancaster twp.	13 “	11,851.32	Essex	13 “	21,999.33
Arkona	10 “	4,374.33	Etobicoke twp.	14 “	139,790.30
Aylmer	13 “	30,941.86	Exeter	15 “	31,076.74
Ayr	17 “	11,002.73	Fergus	17 “	42,238.92
Baden	19 “	24,666.59	Fonthill	11 “	4,315.31
Beachville	19 “	31,021.46	Forest	14 “	23,402.39
Belle River	14 “	7,341.45	Galt	20 “	407,901.76
Blenheim	16 “	28,090.57	Georgetown	18 “	75,101.65
Blyth	13 “	6,998.60	Glencoe	13 “	14,872.85
Bolton	16 “	13,561.57	Goderich	17 “	92,644.14
Bothwell	16 “	13,809.61	Granton	15 “	6,229.81
Brampton	20 “	125,532.18	Guelph	20 “	493,267.71
Brantford	17 “	657,947.36	Hagersville	18 “	59,672.21
Brantford twp.	13 “	23,249.51	Hamilton	20 “	3,243,420.95
Bridgeport	9 “	4,181.21	Harriston	15 “	25,255.76
Brigden	14 “	9,143.51	Harrow	13 “	16,778.70
Brussels	13 “	9,575.61	Hensall	15 “	11,931.42
Burford	16 “	10,201.99	Hespeler	20 “	81,096.90
Burgessville	15 “	4,092.80	Highgate	15 “	7,537.80
Caledonia	19 “	16,660.73	Humberstone	13 “	14,378.00
Campbellville	12 “	1,756.89	Ingersoll	20 “	138,385.49
Cayuga	12 “	6,787.06	Jarvis	13 “	10,877.57
Chatham	16 “	293,727.90	Kingsville	13 “	29,224.91
Chippawa	14 “	12,894.01	Kitchener	20 “	948,070.39
Clifford	13 “	4,910.54	Lambeth	16 “	7,189.16
Clinton	17 “	35,039.76	LaSalle	11 “	9,923.59
Comber	16 “	14,568.57	Leamington	13 “	57,514.42
Cottam	10 “	2,940.15	Listowel	15 “	56,029.22
Courtright	13 “	4,199.44	London	20 “	1,719,351.43
Dashwood	14 “	6,364.37	London Ry. Comm.	17 “	105,938.14
Delaware	16 “	2,233.17	London twp.	12 “	12,954.66
Dorchester	17 “	5,518.15	Long Branch	6 “	14,102.27
Drayton	13 “	9,196.70	Lucan	16 “	14,191.66
Dresden	16 “	23,716.61	Lynden	16 “	10,511.09
Drumbo	17 “	4,852.82	Markham	13 “	13,121.86
Dublin	14 “	4,389.78	Merlin	13 “	9,233.95
Dundas	20 “	105,958.57	Merritton	15 “	87,114.56
Dunnville	13 “	44,784.59	Milton	18 “	77,740.85
Dutton	16 “	14,814.53	Milverton	15 “	33,917.24
East Windsor	14 “	161,984.93	Mimico	19 “	102,841.73

NIAGARA SYSTEM *SINKING FUND*

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder, as part of the cost of power delivered thereto, together with its proportionate share of other sinking funds provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Municipality	Period of years ending Oct. 31, 1936	Amount
		$ c.
Mitchell	20 years	33,031.51
Moorefield	13 “	4,739.91
Mount Brydges	16 “	5,500.28
Newbury	13 “	3,412.89
New Hamburg	20 “	37,347.12
New Toronto	17 “	318,026.70
Niagara Falls	16 “	429,074.29
Niagara-on-the-Lake	13 “	22,585.52
Norwich	19 “	27,730.47
Oil Springs	13 “	18,964.77
Otterville	15 “	6,299.79
Palmerston	15 “	31,911.91
Paris	17 “	84,488.15
Parkhill	13 “	13,774.42
Petrolia	15 “	76,102.81
Plattsville	17 “	6,683.88
Point Edward	14 “	38,973.15
Port Colborne	15 “	68,062.63
Port Credit	19 “	28,090.41
Port Dalhousie	15 “	24,283.88
Port Dover	13 “	17,969.37
Port Rowan	10 “	4,819.32
Port Stanley	19 “	29,453.33
Preston	20 “	197,142.10
Princeton	17 “	6,524.03
Queenston	13 “	4,995.30
Richmond Hill	12 “	12,805.52
Ridgetown	16 “	30,911.58
Riverside	14 “	59,815.40
Rockwood	18 “	8,380.66
Rodney	14 “	9,549.84
St. Catharines	15 “	402,351.39
St. Clair Beach	14 “	4,846.53
St. George	16 “	10,370.12
St. Jacobs	14 “	11,055.34
St. Marys	20 “	100,471.79
St. Thomas	20 “	356,802.09
Sandwich	13 “	164,414.84
Sarnia	15 “	449,052.97
Scarboro twp	13 “	125,623.14
Seaforth	20 “	47,321.34
Simcoe	16 “	71,476.90
Springfield	14 “	7,021.75
Stamford twp	15 “	68,210.78
Stouffville	13 “	11,325.92
Stratford	20 years	448,585.52
Strathroy	17 “	63,740.46
Streetsville	2 “	730.34
Sutton	13 “	10,816.32
Tavistock	15 “	32,744.53
Tecumseh	14 “	18,412.38
Thamesford	17 “	12,533.87
Thamesville	16 “	12,714.28
Thedford	13 “	6,760.34
Thorndale	17 “	6,501.41
Thorold	14 “	68,078.30
Tilbury	16 “	33,588.45
Tillsonburg	20 “	63,347.22
Toronto	20 “	14,030,736.71
Toronto twp	18 “	72,896.37
Trafalgar twp	2 “	2,742.10
Walkerville	17 “	461,498.30
Wallaceburg	16 “	136,245.39
Wardsville	13 “	2,620.26
Waterdown	20 “	17,221.34
Waterford	16 “	23,421.32
Waterloo	20 “	189,264.71
Watford	14 “	16,284.59
Welland	14 “	201,592.80
Wellesley	15 “	12,609.46
West Lorne	15 “	19,978.73
Weston	20 “	168,410.20
Wheatley	13 “	9,222.80
Windsor	17 “	1,434,899.29
Woodbridge	17 “	21,670.55
Woodstock	20 “	283,389.74
Wyoming	15 “	6,018.27
York East twp	12 “	182,204.73
York North twp	13 “	85,933.33
Zurich	14 “	9,821.20
Ont. Reformatory	2 “	1,665.23
Toronto Trans. Com.	15 “	149,971.59
Sandwich, Windsor & Amherstburg Ry. Co.	14 “	141,849.65
Mimico Asylum	2 “	1,036.29
Prison Brick Yard	2 “	745.15
Total—Municipalities		$32,253,327.18

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder, as part of the cost of power delivered thereto, together with its proportionate share of other sinking funds provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Rural Power District*	Period of years ending Oct. 31, 1936	Amount
		$ c.
Acton R.P.D.	9 years	829.57
Ailsa Craig R.P.D.	7 "	441.29
Alvinston R.P.D.	8 "	369.69
Amherstburg R.P.D.	13 "	38,155.39
Aylmer R.P.D.	15 "	21,214.52
Ayr R.P.D.	11 "	2,991.42
Baden R.P.D.	15 "	21,207.76
Beamsville R.P.D.	14 "	60,137.30
Belle River R.P.D.	14 "	17,797.87
Blenheim R.P.D.	13 "	10,584.55
Bond Lake R.P.D.	13 "	49,310.18
Bothwell R.P.D.	13 "	9,620.11
Brampton R.P.D.	13 "	8,003.14
Brant R.P.D.	15 "	27,179.94
Brigden R.P.D.	10 "	4,726.48
Burford R.P.D.	10 "	8,883.88
Caledonia R.P.D.	12 "	17,549.39
Chatham R.P.D.	15 "	30,280.53
Chippawa R.P.D.	15 "	8,971.82
Clinton R.P.D.	9 "	9,488.71
Delaware R.P.D.	14 "	23,625.69
Dorchester R.P.D.	15 "	29,641.53
Dresden R.P.D.	9 "	2,397.79
Drumbo R.P.D.	15 "	9,818.25
Dundas R.P.D.	15 "	32,749.04
Dunnville R.P.D.	9 "	2,214.87
Dutton R.P.D.	11 "	7,087.26
Elmira R.P.D.	11 "	3,664.15
Elora R.P.D.	11 "	8,275.50
Essex R.P.D.	12 "	16,059.44
Exeter R.P.D.	14 "	20,835.23
Forest R.P.D.	10 "	3,519.30
Galt R.P.D.	15 "	10,107.93
Georgetown R.P.D.	12 "	8,744.28
Goderich R.P.D.	12 "	6,976.35
Grantham R.P.D.	12 "	31,501.86
Guelph R.P.D.	12 "	19,161.44
Haldimand R.P.D.	12 "	11,074.59
Harriston R.P.D.	7 "	1,606.14
Harrow R.P.D.	13 "	20,895.23
Ingersoll R.P.D.	15 "	24,679.40
Jordan R.P.D.	15 "	13,850.48
Keswick R.P.D.	13 "	25,519.45
Kingsville R.P.D.	13 "	49,709.82
Listowel R.P.D.	10 "	9,292.98
London R.P.D.	14 "	86,162.99
Lucan R.P.D.	11 "	5,439.38
Lynden R.P.D.	15 years	13,243.50
Markham R.P.D.	14 "	25,644.45
Merlin R.P.D.	8 "	11,825.33
Milton R.P.D.	12 "	10,758.36
Milverton R.P.D.	10 "	4,919.27
Mitchell R.P.D.	11 "	12,215.02
Newmarket R.P.D.	13 "	15,290.55
Niagara R.P.D.	15 "	27,619.66
Norwich R.P.D.	12 "	25,308.21
Oil Springs R.P.D.	11 "	3,836.45
Palmerston R.P.D.	10 "	3,299.82
Petrolia R.P.D.	14 "	2,301.03
Preston R.P.D.	15 "	52,541.77
Ridgetown R.P.D.	15 "	25,590.42
St. Jacobs R.P.D.	14 "	16,238.91
St. Marys R.P.D.	9 "	15,770.62
St. Thomas R.P.D.	14 "	38,014.65
Saltfleet R.P.D.	15 "	59,226.58
Sandwich R.P.D.	15 "	67,746.27
Sarnia R.P.D.	14 "	36,157.36
Scarboro R.P.D.	13 "	19,508.47
Seaforth R.P.D.	9 "	3,337.23
Simcoe R.P.D.	14 "	12,788.62
Stamford R.P.D.	15 "	8,920.85
Stratford R.P.D.	13 "	12,352.05
Strathroy R.P.D.	10 "	7,014.00
Streetsville R.P.D.	14 "	21,637.99
Tavistock R.P.D.	14 "	12,282.73
Thamesville R.P.D.	9 "	7,703.39
Tilbury R.P.D.	13 "	9,888.11
Tillsonburg R.P.D.	13 "	29,860.91
Wallaceburg R.P.D.	14 "	18,713.01
Walsingham R.P.D.	10 "	13,269.71
Walton R.P.D.	12 "	7,572.05
Waterdown R.P.D.	14 "	34,246.69
Waterford R.P.D.	13 "	10,884.21
Watford R.P.D.	7 "	1,551.39
Welland R.P.D.	7 "	81,526.83
Woodbridge R.P.D.	14 "	44,097.18
Woodstock R.P.D.	15 "	37,136.79

Total—Rural power districts. $1,694,194.35

Total—Municipalities $32,253,327.18
Total—Rural power districts. 1,694,194.35

Grand total $33,947,521.53

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*For townships included in rural power districts see "Cost of Power" statement preceding.

NIAGARA SYSTEM—RURAL LINES

Statement showing Interest, Depreciation and Obsolescence, Contingencies and Sinking Fund charged by the Commission to the Municipalities which operate the respective rural lines for the year ending October 31, 1936

Operated by	Capital cost	Interest	Provision for depreciation and obsolescence	Provision for contingencies	Provision for sinking fund	Total interest depreciation and obsolescence, contingencies and sinking fund charged
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Milton	440.82	21.86	8.82	4.41	7.93	43.02
Welland	19,617.60	823.94	392.35	196.18	353.12	1,765.59
Totals	20,058.42	845.80	401.17	200.59	361.05	1,808.61

NIAGARA SYSTEM—RURAL LINES

Statement showing the total Sinking Fund in respect of each line, together with interest allowed thereon to October 31, 1936

Lines operated by	Period of years ending October 31, 1936	Amount
		$ c.
Milton	23 years	271.61
Welland	24 "	13,041.04
Total		13,312.65

GEORGIAN BAY

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
	To Oct. 31 1935	To Oct. 31 1936			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Alliston	55.00	55.00	95,610.96	239.8	508.56	3,476.66	4,517.42
Arthur	72.00	67.50	67,489.11	132.8	281.64	2,835.84	3,188.30
Barrie	34.00	32.50	565,890.40	2,366.5	5,018.76	23,263.16	26,727.48
Beaverton	42.00	40.00	51,772.34	188.3	399.34	2,673.03	2,445.54
Beeton	72.00	71.50	52,913.95	97.7	207.20	1,735.97	2,500.43
Bradford	64.00	58.00	69,164.56	167.5	355.23	2,927.28	3,267.36
Brechin	55.00	48.50	18,992.61	54.4	115.37	859.69	897.29
Cannington	42.00	40.50	41,556.52	146.8	311.33	2,201.00	1,963.00
Chatsworth	45.00	43.00	16,049.59	55.9	118.55	1,132.17	758.14
Chesley	37.00	35.50	136,128.04	508.8	1,079.04	5,857.17	6,429.21
Coldwater	37.00	36.50	64,999.81	247.8	525.52	2,710.40	3,070.23
Collingwood	40.00	39.00	332,421.27	1,160.9	2,461.98	14,597.46	15,702.90
Cookstown	55.00	50.00	21,264.82	59.1	125.34	880.99	1,004.67
Creemore	55.00	54.50	37,176.13	95.8	203.17	1,698.01	1,756.48
Dundalk	40.00	37.00	49,619.79	192.3	407.82	2,469.91	2,343.74
Durham	43.00	40.50	87,036.26	302.6	641.74	3,822.48	4,111.40
Elmvale	40.00	39.50	38,908.97	142.5	302.21	2,183.45	1,837.90
Elmwood	44.00	42.50	17,913.73	62.7	132.97	986.18	846.20
Flesherton	48.00	45.50	23,781.98	76.1	161.39	1,252.67	1,123.47
Grand Valley	56.00	53.00	41,319.36	107.1	227.13	2,058.65	1,951.80
Gravenhurst	25.00	25.00	126,074.15	686.2	....	6,087.60	5,955.21
Hanover	33.00	32.00	256,460.80	1,061.1	2,250.33	10,363.31	12,112.94
Holstein	90.00	90.00	10,789.53	18.6	39.44	445.39	509.87
Huntsville	28.00	28.00	190,280.08	850.7	....	8,723.63	8,989.30
Kincardine	50.00	46.50	205,946.36	559.0	1,185.50	9,594.84	9,736.15
Kirkfield	60.00	56.00	10,972.51	23.9	50.69	441.97	518.48
Lucknow	60.00	53.50	97,153.00	238.5	505.80	4,267.14	4,590.32
Markdale	38.00	37.00	41,144.44	160.3	339.96	2,088.09	1,943.39
Meaford	43.00	40.50	152,570.57	507.5	1,076.28	7,187.82	7,209.33
Midland	33.00	31.50	592,695.36	2,525.6	5,356.17	25,019.89	27,992.95
Mildmay	54.00	48.50	29,175.84	80.7	171.14	1,102.78	1,378.40
Mount Forest	48.00	46.00	124,452.95	395.8	839.39	5,067.38	5,879.28
Neustadt	70.00	67.50	13,679.97	28.3	60.02	548.72	646.42
Orangeville	47.00	45.00	187,351.60	547.2	1,160.48	7,274.37	8,849.06
Owen Sound	32.00	32.00	817,478.24	3,439.1	7,293.48	33,137.13	38,563.56
Paisley	58.00	54.00	48,998.67	115.2	244.31	1,865.47	2,315.16
Penetanguishene	38.00	36.50	176,782.54	650.8	1,380.18	6,636.37	8,350.47
Port Elgin	38.00	38.00	94,215.01	286.7	608.02	3,414.43	4,450.94
Port McNicoll	38.00	37.00	22,443.76	80.0	169.66	866.53	1,060.17
Port Perry	52.00	47.50	89,345.41	253.1	536.76	3,490.56	4,211.58

SYSTEM *G.B.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,444.93	316.83	1,006.24	82.70	11,353.34	13,186.68	1,833.34	....
1,090.66	220.58	710.18	45.80	8,373.00	8,965.10	592.10	....
6,706.28	2,113.86	5,953.46	816.17	70,599.17	76,911.75	6,312.58	....
668.51	191.60	544.73	64.94	6,987.69	7,531.30	543.61	....
867.89	169.17	556.96	33.69	6,071.31	6,987.29	915.98	....
1,056.64	232.64	727.79	57.77	8,624.71	9,713.03	1,088.32	....
273.84	69.17	199.87	18.76	2,433.99	2,638.35	204.36	....
545.05	153.14	437.25	50.63	5,661.40	5,944.36	282.96	....
212.05	63.91	168.87	19.28	2,472.97	2,402.96	....	70.01
1,730.72	522.72	1,432.08	175.47	17,226.41	18,063.44	837.03	....
817.11	251.72	683.88	85.46	8,144.32	9,044.49	900.17	....
4,386.22	1,219.04	3,497.77	400.39	42,265.76	45,276.39	3,010.63	....
310.14	78.38	223.79	20.38	2,643.69	2,953.30	309.61	....
556.85	130.65	391.25	33.04	4,769.45	5,223.33	453.88	....
617.66	186.93	522.06	66.32	6,614.44	7,113.75	499.31	....
1,151.04	330.86	915.80	104.36	11,077.68	12,254.87	1,177.19	....
500.49	150.25	409.39	49.14	5,432.83	5,628.81	195.98	....
236.09	72.34	188.49	21.62	2,483.89	2,666.48	182.59	....
294.32	86.12	250.25	26.25	3,194.47	3,463.27	268.80	....
617.50	143.49	434.76	36.94	5,470.27	5,674.52	204.25	....
1,185.25	493.15	1,326.50	236.66	15,284.37	17,155.27	1,870.90	....
3,061.46	1,005.81	2,698.10	365.95	31,857.90	33,956.45	2,098.55	....
179.54	33.02	113.57	6.41	1,327.24	1,671.75	344.51	....
2,149.03	692.28	2,002.33	293.39	22,849.96	23,818.36	968.40	....
3,032.19	702.42	2,168.69	192.79	26,612.58	25,995.33	....	617.25
172.88	36.29	115.49	8.24	1,344.04	1,336.51	....	7.53
1,478.30	330.77	1,022.48	82.25	12,277.06	12,761.95	484.89	....
477.22	151.51	432.88	55.28	5,488.33	5,929.85	441.52	....
2,063.29	542.51	1,605.85	175.03	19,860.11	20,552.91	692.80	....
6,932.30	2,157.58	6,235.32	871.05	74,565.26	79,556.47	4,991.21	....
409.21	106.41	307.03	27.83	3,502.80	3,913.51	410.71	....
1,717.77	433.46	1,309.59	136.50	15,383.37	18,207.54	2,824.17	....
218.45	43.92	143.99	9.76	1,671.28	1,910.21	238.93	....
2,679.83	651.40	1,971.10	188.72	22,774.96	24,624.73	1,849.77	....
9,628.24	3,020.00	8,589.89	1,186.09	101,418.39	110,050.89	8,632.50	....
755.48	167.54	515.69	39.73	5,903.38	6,220.35	316.97	....
2,267.45	641.45	1,860.04	224.45	21,360.41	23,755.18	2,394.77	....
1,325.61	328.63	991.43	98.88	11,217.94	10,894.44	....	323.50
292.97	88.26	236.15	27.59	2,741.33	2,959.67	218.34	....
1,289.69	300.80	938.11	87.29	10,854.79	12,020.63	1,165.84	....

GEORGIAN BAY

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
	To Oct. 31 1935	To Oct. 31 1936			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Priceville	70.00	60.00	4,331.75	14.6	30.96	411.94	204.62
Ripley	75.00	70.00	29,672.79	53.4	113.25	1,196.07	1,402.20
Rosseau	100.00	90.50	28,312.25	36.0	....	792.03	1,338.16
Shelburne	46.00	42.00	70,376.26	231.5	490.95	3,340.12	3,324.57
Southampton	38.00	38.00	73,936.04	226.0	479.29	2,657.86	3,492.91
Stayner	42.00	40.00	59,370.63	209.7	444.72	2,652.42	2,804.52
Sunderland	56.00	54.00	25,434.84	62.9	133.40	1,119.23	1,201.74
Tara	46.00	42.50	25,956.62	82.5	174.96	1,154.92	1,226.22
Teeswater	57.00	52.50	43,168.63	105.7	224.16	1,998.14	2,039.64
Thornton	70.00	60.50	12,407.82	26.7	56.62	425.92	586.28
Tottenham	88.00	88.00	40,395.22	58.9	124.91	1,302.72	1,913.93
Uxbridge	52.00	48.50	82,406.32	221.8	470.38	3,042.64	3,893.75
Victoria Harbour	42.00	40.00	20,847.68	68.6	145.48	1,130.92	984.85
Walkerton	36.00	34.50	122,096.03	495.5	1,050.83	5,463.31	5,766.84
Waubaushene	42.00	40.00	15,408.16	61.3	130.00	813.46	727.95
Wiarton	65.00	61.00	110,835.51	236.1	500.71	3,687.56	5,237.17
Windermere	70.00	62.50	17,468.60	38.2	....	684.97	825.53
Wingham	56.00	52.50	138,414.67	321.1	680.97	5,815.72	6,540.05
Woodville	58.00	54.00	21,480.13	53.6	113.67	937.71	1,014.91
Totals—Municipalities			6,060,340.94	21,517.8	42,217.16	255,873.25	286,231.78
RURAL POWER DISTRICTS							
Alliston R.P.D.—Essa, Tecumseth and Tossorontio twps.			29,321.06	84.8	179.84	1,036.24	1,385.26
Arthur R.P.D.—Luther E. and Luther W. twps.			1,504.62	3.9	8.27	64.05	71.08
Bala R.P.D.—Medora and Wood twp.			40,302.48	164.5	348.86	1,828.24	1,902.68
Barrie R.P.D.—Innisfil, Oro and Vespra twps.			84,865.35	287.7	610.14	3,121.16	4,008.97
Baysville R.P.D.—Franklin, Macaulay, McLean, Ridout and Sherbourne twps.			22,138.85	76.3	....	926.49	1,032.85
Beaumaris R.P.D.—Macaulay, Medora and Wood, Monck and Muskoka twps.			41,236.39	191.2	....	2,006.72	1,948.86
Beaverton R.P.D.—Brock, Georgina, Mara and Thorah twps.			46,955.50	162.1	343.78	2,532.73	2,218.07
Beeton R.P.D.—Tecumseth twp.			2,707.96	5.0	10.60	79.14	127.97
Bradford R.P.D.—Gwillimbury W., King and Tecumseth twps.			20,408.78	47.3	100.31	664.10	964.18
Bruce R.P.D.—Amabel, Brant, Carrick, Culross, Greenock and Saugeen twps.			51,094.40	141.9	300.94	1,828.25	2,413.97

SYSTEM *G.B.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
58.18	17.40	45.58	5.04	773.72	877.50	103.78	
489.40	93.86	312.33	18.42	3,625.53	3,735.63	110.10	
496.14	87.13	298.07	12.41	3,023.94	3,261.72	237.78	
956.41	260.70	740.54	79.84	9,193.13	9,721.44	528.31	
1,038.32	263.93	778.03	77.94	8,788.28	8,586.81		201.47
778.77	224.81	624.70	72.32	7,602.26	8,389.80	787.54	
386.12	86.28	267.68	21.69	3,216.14	3,398.85	182.71	
358.36	99.74	273.14	28.45	3,315.79	3,507.98	192.19	
657.39	166.91	454.32	36.45	5,577.01	5,548.90		28.11
196.13	44.87	130.59	9.21	1,449.62	1,612.79	163.17	
695.21	125.36	426.32	20.31	4,608.76	5,180.95	572.19	
1,216.07	277.96	867.32	76.49	9,844.61	10,758.07	913.46	
283.28	78.56	219.37	23.66	2,866.12	2,744.65		121.47
1,371.77	463.76	1,284.54	170.89	15,571.94	17,093.49	1,521.55	
188.79	61.50	162.15	21.14	2,104.99	2,451.31	346.32	
1,756.64	362.91	1,166.56	81.43	12,792.98	14,402.57	1,609.59	
274.98	61.00	183.88	13.17	2,043.53	2,385.39	341.86	
2,142.57	474.68	1,456.77	110.74	17,221.50	16,859.91		361.59
325.16	71.68	226.07	18.48	2,707.68	2,891.70	184.02	
79,069.84	21,953.65	63,757.06	7,421.08	756,523.82	812,344.93	57,552.04	1,730.93
421.18	101.84	308.56	29.24	3,462.16	3,462.16	see page	241
22.48	5.22	15.83	1.35	188.28	188.28	"	"
455.47	152.17	423.81	56.72	5,167.95	5,167.95	"	"
1,136.68	333.77	892.98	99.22	10,202.92	10,202.92	"	"
288.62	93.93	230.06	26.31	2,598.26	2,598.26	"	"
452.74	169.12	434.10	65.94	5,077.48	5,077.48	"	"
623.22	173.79	494.07	55.91	6,441.57	6,441.57	"	"
44.41	8.66	28.50	1.72	301.00	301.00	"	"
315.93	70.08	214.77	16.31	2,345.68	2,345.68	"	"
736.56	182.54	537.70	48.94	6,048.90	6,048.90	"	"

GEORGIAN BAY

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Buckskin R.P.D.—Matchedash, Medora and Wood twps.	5,568.88	14.9	31.60	250.62	263.51
Cannington R.P.D.—Brock, Eldon and Mariposa twps.	14,415.60	44.7	94.80	612.74	680.99
Chatsworth R.P.D.—Holland twp.	3,738.57	8.3	17.60	191.87	176.65
Cookstown R.P.D.—Essa, Innisfil and Tecumseth twps.	431.76	1.2	2.54	14.88	20.40
Creemore R.P.D.—Nottawasaga, Osprey, Sunnidale and Tossorontio twps.	17,313.60	55.0	116.64	679.18	817.95
Dundalk R.P.D.—Melancthon and Proton twps.	1,599.80	6.2	13.15	68.36	75.57
Elmvale R.P.D.—Flos, Medonte, Oro and Vespra twps.	19,717.99	65.4	138.70	700.62	931.48
Flesherton R.P.D.—Artemesia twp.	2,450.50	7.8	16.54	114.66	115.77
Gravenhurst R.P.D.—Muskoka twp.	6,300.15	31.9	....	357.48	297.61
Hawkestone R.P.D.—Medonte, Orillia and Oro twp.	713.46	84.5	1,858.99	45.33	33.72
Holstein R.P.D.—Bentinck, Egremont and Normanby twps.	....	....	....	....	....
Huntsville R.P.D.—Brunel, Chaffey, Franklin and Sinclair twps.	19,102.16	75.2	....	1,083.47	902.53
Innisfil R.P.D.—Gwillimbury W. and Innisfil twps.	80,656.78	236.8	502.19	2,923.51	3,811.10
Lucknow R.P.D.—Kinloss twp.	....	....	....	....	....
Mariposa R.P.D.—Brock, Mariposa and Reach twps.	47,113.57	156.4	331.69	1,891.86	2,225.62
Markdale R.P.D.—Artemesia, Euphrasia, Glenelg and Holland twps.	12,964.01	42.4	89.92	527.14	612.43
Meaford R.P.D.—St. Vincent twp.	3,397.13	11.3	23.96	149.88	160.52
Medonte R.P.D.—Baxter and Tay twps.	9,571.22	29.6	62.77	371.08	372.21
Midland R.P.D.—Flos, Medonte, Tay and Tiny twps.	22,715.06	83.7	177.50	1,024.73	1,053.86
Minden R.P.D.—Anson and Hindon, and Minden twps.	....	20.9	459.54	27.63	....
Neustadt R.P.D.—Bentinck and Normanby twps.	618.82	2.3	4.88	23.25	29.24
Nottawasaga R.P.D.—Nottawasaga twp.	9,893.26	32.5	68.92	411.18	467.34
Orangeville R.P.D.—Amaranth, Caledon, Erin and Garafraxa E. twps.	15,264.94	42.1	89.28	541.40	721.02
Owen Sound R.P.D.—Derby, Sarawak and Sydenham twps.	11,228.57	45.6	96.71	440.00	529.73
Port Perry R.P.D.—Cartwright, Manvers, Reach and Scugog twps.	47,722.11	122.7	260.22	1,792.83	2,254.93

SYSTEM *G.B.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
82.51	24.11	58.70	5.14	716.19	716.19	see page	241
201.19	51.21	151.69	15.42	1,808.04	1,808.04	"	"
58.60	16.36	39.35	2.86	503.29	503.29	"	"
6.30	1.59	4.54	0.41	50.66	50.66	"	"
239.11	63.32	182.20	18.97	2,117.37	2,117.37	"	"
19.91	6.03	16.83	2.14	201.99	201.99	"	"
266.92	80.24	207.48	22.55	2,347.99	2,347.99	"	"
30.43	9.87	25.79	2.69	315.75	315.75	"	"
63.88	25.12	66.29	11.00	821.38	821.38	"	"
14.26	3.57	7.51	29.14	1,992.52	1,992.52	"	"
....	....	....	....	....	....	....	....
235.60	72.60	201.04	25.93	2,521.17	2,521.17	"	"
1,151.93	287.05	848.91	81.67	9,606.36	9,606.36	"	"
....	....	....	....	....	....	....	....
637.49	169.31	495.75	53.94	5,805.66	5,805.66	"	"
173.54	53.52	136.42	14.62	1,607.59	1,607.59	"	"
45.94	12.08	35.76	3.90	432.04	432.04	"	"
97.87	31.69	82.91	10.21	1,028.74	1,028.74	"	"
283.11	82.86	234.75	28.87	2,885.68	2,885.68	"	"
....	....	....	7.21	494.38	494.38	"	"
7.90	2.34	6.51	0.79	74.91	74.91	"	"
134.53	37.06	104.10	11.21	1,234.34	1,234.34	"	"
223.18	54.37	160.60	14.52	1,804.37	1,804.37	"	"
135.45	41.99	118.00	15.73	1,377.61	1,377.61	"	"
715.45	168.37	502.28	42.32	5,736.40	5,736.40	"	"

GEORGIAN BAY

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Ripley R.P.D.—Huron, Kincardine and Kinloss twps	4,528.13	11.1	23.54	193.21	213.97
Sauble R.P.D.—Albermarle, Amabel and Keppel twps	9,844.22	21.2	44.96	319.10	465.13
Shelburne R.P.D.—Amaranth, Melancthon and Mulmur twps	14,341.05	43.8	92.89	576.25	677.51
Sparrow Lake R.P.D.—Matchedash, Morrison, Orillia and Rama twps	34,280.61	144.9	307.30	1,312.88	1,619.07
Tara R.P.D.—Amabel, Arran, Derby, Keppel and Sullivan twps	19,118.39	59.7	126.61	860.52	903.22
Thornton R.P.D.—Essa twp	6,585.18	13.1	27.78	175.97	311.16
Tottenham R.P.D.—Tecumseth twp.	137.14	0.2	0.42	3.86	6.47
Utterson R.P.D.—Brunel, Cardwell, Humphrey, Medora and Wood, Stephenson and Watt twps	21,099.16	57.2	....	643.85	997.03
Uxbridge R.P.D.—Brock, Georgina, Reach, Scott and Uxbridge twps	42,693.38	113.4	240.49	1,567.17	2,017.28
Wasaga Beach R.P.D.—Flos, Nottawasaga, Sunnidale and Tiny twps	52,264.28	184.6	391.49	2,026.12	2,468.83
Wroxeter R.P.D.—Howick, Morris and Turnberry twps	51,911.40	113.3	240.28	2,075.63	2,453.69
Totals—Rural power districts	949,836.27	3,148.6	7,856.64	38,085.38	44,761.43
Totals—Municipalities	6,060,340.94	21,517.8	42,217.16	255,873.25	286,231.78
Totals—Rural power districts	949,836.27	3,148.6	7,856.64	38,085.38	44,761.43
Totals—Companies and distributing systems	557,764.99	1,637.2	3,472.11	24,252.71	26,288.52
	7,567,942.20				
Non-operating capital	4,320.56				
Grand totals	7,572,262.76	26,303.6	53,545.91	318,211.34	357,281.73

SYSTEM *G.B.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c	$ c.	$ c.	$ c.	$ c.
68.95	15.38	47.66	3.82	566.53	566.53	see page	241
155.56	35.15	103.61	7.31	1,130.82	1,130.82	"	"
201.46	54.46	150.91	15.11	1,768.59	1,768.59	"	"
403.24	134.64	360.64	49.97	4,187.74	4,187.74	"	"
266.05	76.70	201.19	20.58	2,454.87	2,454.87	"	"
106.17	24.50	69.31	4.52	719.41	719.41	"	"
2.35	0.42	1.44	0.07	15.03	15.03	"	"
310.60	74.88	222.08	19.73	2,268.17	2,268.17	"	"
632.96	144.92	449.34	39.11	5,091.27	5,091.27	"	"
685.55	197.90	549.92	63.66	6,383.47	6,383.47	"	"
817.79	182.94	546.55	39.07	6,355.95	6,355.95	"	"
12,973.07	3,527.67	9,970.44	1,085.85	118,260.48	118,260.48	....	....
79,069.84	21,953.65	63,757.06	7,421.08	756,523.82	812,344.93	57,552.04	1,730.93
12,973.07	3,527.67	9,970.44	1,085.85	118,260.48	118,260.48	....	....
7,857.61	2,569.66	5,853.15	(8,506.93)	61,786.83	61,786.83	....	....
99,900.52	28,050.98	79,580.65	....	936,571.13	992,392.24	57,552.04	1,730.93

GEORGIAN BAY SYSTEM—

Statement showing the costs of distribution of power within each Rural Power and the amounts remaining to be credited to certain Districts or charged to annual adjustment) of the actual costs

Rural power district	Total capital cost of each district, Provincial Government grant received and applied there against, and the balance representing the investment by the Commission			Cost of power delivered to districts as shown in "cost of power" table preceding
	Total capital cost	Government grant	Commission's investment	
	$ c.	$ c.	$ c.	$ c.
Alliston R.P.D.	41,263.04	20,380.24	20,882.80	3,462.16
Arthur R.P.D.	*4,829.58	2,286.39	2,543.19	188.28
Bala R.P.D.	*91,592.66	45,045.81	46,546.85	5,167.95
Barrie R.P.D.	147,800.15	73,900.07	73,900.08	10,202.92
Baysville R.P.D.	74,410.58	37,205.29	37,205.29	2,598.26
Beaumaris R.P.D.	111,862.80	55,931.40	55,931.40	5,077.48
Beaverton R.P.D.	*71,562.56	35,435.13	36,127.43	6,441.57
Beeton R.P.D.	3,018.23	1,509.11	1,509.12	301.00
Bradford R.P.D.	38,472.60	19,071.23	19,401.37	2,345.68
Bruce R.P.D.	64,162.98	30,560.72	33,602.26	6,048.90
Buckskin R.P.D.	5,690.80	2,845.40	2,845.40	716.19
Cannington R.P.D.	*18,503.89	7,851.10	10,652.79	1,808.04
Chatsworth R.P.D.	1,497.32	748.66	748.66	503.29
Cookstown R.P.D.	1,234.60	617.30	617.30	50.66
Creemore R.P.D.	*46,906.26	22,666.33	24,239.93	2,117.37
Dundalk R.P.D.	5,803.71	2,901.86	2,901.85	201.99
Elmvale R.P.D.	40,349.71	20,041.68	20,308.03	2,347.99
Flesherton R.P.D.	*5,661.12	2,643.79	3,017.33	315.75
Gravenhurst R.P.D.	10,947.36	5,473.68	5,473.68	821.38
Hawkestone R.P.D.	61,816.15	30,908.07	30,908.08	1,992.52
Holstein R.P.D.	1,900.53	950.26	950.27	....
Huntsville R.P.D.	69,756.92	34,878.46	34,878.46	2,521.17
Innisfil R.P.D.	110,556.99	55,278.49	55,278.50	9,606.36
Lucknow R.P.D.	637.09	318.55	318.54	....
Mariposa R.P.D.	82,312.13	41,156.07	41,156.06	5,805.66
Markdale R.P.D.	*30,520.02	15,133.94	15,386.08	1,607.59
Meaford R.P.D.	9,233.14	4,616.57	4,616.57	432.04
Medonte R.P.D.	55,640.94	27,820.47	27,820.47	1,028.74
Midland R.P.D.	72,245.14	36,122.57	36,122.57	2,885.68
Minden R.P.D.	6,392.12	3,196.06	3,196.06	494.38
Neustadt R.P.D.	*1,742.04	824.33	917.71	74.91
Nottawasaga R.P.D.	17,509.15	8,754.57	8,754.58	1,234.34
Orangeville R.P.D.	36,952.48	18,476.24	18,476.24	1,804.37
Owen Sound R.P.D.	35,929.31	17,964.65	17,964.66	1,377.61
Port Perry R.P.D.	87,451.46	43,725.73	43,725.73	5,736.40
Ripley R.P.D.	*9,783.55	4,658.31	5,125.24	566.53
Sauble R.P.D.	12,981.28	6,490.64	6,490.64	1,130.82
Shelburne R.P.D.	26,325.75	12,535.05	13,790.70	1,768.59
Sparrow Lake R.P.D.	103,853.63	51,926.81	51,926.82	4,187.74
Tara R.P.D.	46,160.29	23,080.15	23,080.14	2,454.87
Thornton R.P.D.	9,440.39	4,720.20	4,720.19	719.41
Tottenham R.P.D.	555.36	277.68	277.68	15.03
Utterson R.P.D.	*58,061.60	28,074.49	29,987.11	2,268.17
Uxbridge R.P.D.	89,635.14	44,817.57	44,817.57	5,091.27
Wasaga Beach R.P.D.	79,936.55	....	79,936.55	6,383.47
Wroxeter R.P.D.	77,021.42	37,093.86	39,927.56	6,355.95
Total capital	1,979,920.52	940,914.98	1,039,005.54	....
Non-operating capital	3,425.10	1,712.55	1,712.55	....
Grand totals	1,983,345.62	942,627.53	1,040,718.09	118,260.48

Note—Items marked * include portions of transmission lines aggregating $9,868.63 used for purposes of rural power districts.

RURAL POWER DISTRICTS *G.B.—RURAL OPERATING*

District, the revenues collected from (or charged to) customers within each District; the Municipalities comprising certain other Districts upon ascertainment (by in the year ending October 31, 1936

Distribution costs and fixed charges				Total Cost	Revenue from power and light customers in each District	Amounts remaining to be credited to certain districts or charged to the municipalities comprising certain other districts	
Cost of operation, maintenance and administration	Interest	Provision for depreciation and obsolescence	Sinking fund			Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,719.96	963.31	704.43	214.55	7,064.41	7,166.12	101.71	......
126.52	117.97	80.92	26.27	539.96	596.10	56.14	......
4,188.66	1,971.25	1,422.16	439.09	13,189.11	11,558.41	......	1,630.70
4,219.29	3,172.32	2,348.69	706.63	20,649.85	22,092.75	1,442.90	......
1,334.88	1,745.30	1,292.16	388.76	7,359.36	6,370.79	......	988.57
4,045.19	2,422.15	1,793.30	539.53	13,877.65	13,947.18	69.53	......
2,722.33	1,636.74	1,198.31	364.58	12,363.53	11,858.22	......	505.31
65.65	71.35	52.83	15.89	506.72	260.21	......	246.51
1,056.38	901.22	661.45	200.75	5,165.48	4,356.67	......	808.81
1,563.98	1,579.27	1,080.80	351.79	10,624.74	12,213.68	1,588.94	......
131.78	105.97	78.45	23.60	1,055.99	618.36	......	437.63
1,376.87	501.89	302.68	111.80	4,101.28	3,612.56	......	488.72
161.89	35.39	26.20	7.88	734.65	643.95	......	90.70
51.29	28.18	20.86	6.28	157.27	146.18	......	11.09
1,318.67	1,141.88	809.58	254.36	5,641.86	4,771.19	......	870.67
203.58	102.30	75.74	22.79	606.40	499.70	......	106.70
1,450.21	958.28	704.81	213.45	5,674.74	6,390.02	715.28	......
458.38	142.10	95.88	31.65	1,043.76	787.77	......	255.99
226.62	186.51	138.09	41.55	1,414.15	1,345.32	......	68.83
1,779.74	1,362.56	1,008.80	303.51	6,447.13	6,448.01	0.88	......
3.03	44.92	33.25	10.01	91.21	......	......	91.21
1,612.73	1,483.28	1,098.18	330.40	7,045.76	6,076.97	......	968.79
3,893.24	2,470.40	1,829.01	550.27	18,349.28	20,576.48	2,227.20	......
1.25	15.06	11.15	3.35	30.81	......	......	30.81
2,767.14	1,917.49	1,419 65	427.11	12,337.05	14,337.93	2,000.88	......
1,304.67	724.61	530.17	161.40	4,328.44	3,465.62	......	862.82
32.07	109.86	81.34	24.47	679.78	532.30	......	147.48
968.24	717.40	531.14	159.80	3,405.32	2,413.13	......	992.19
2,044.91	1,310.65	970.38	291.95	7,503.57	6,267.74	......	1,235.83
347.81	120.64	89.31	26.87	1,079.01	1,165.19	86.18	......
13.08	33.36	22.37	7.43	151.15	211.85	60.70	......
883.46	412.15	305.15	91.80	2,926.90	3,047.26	120.36	......
555.08	863.94	639.66	192.44	4,055.49	3,618.49	......	437.00
1,043.04	680.78	504.04	151.64	3,757.11	3,681.64	......	75.47
2,724.37	2,037.48	1,508.50	453.84	12,460.59	13,329.04	868.45	......
207.18	234.55	161.98	52.24	1,222.48	694.86	......	527.62
516.24	235.63	174.46	52.49	2,109.64	2,060.63	......	49.01
839.57	613.11	431.94	136.57	3,789.78	2,889.58	......	900.20
2,370.50	2,221.69	1,644.88	494.83	10,919.64	11,125.35	205.71	......
2,106.48	786.22	582.10	175.13	6,104.80	5,206.26	......	898.54
189.65	223.14	165.20	49.70	1,347.10	1,149.83	......	197.27
39.30	6.56	4.87	1.46	67.22	34.45	......	32.77
2,421.87	1,275.24	896.34	284.06	7,145.68	7,310.67	164.99	......
2,192.12	2,016.38	1,492.87	449.14	11,241.78	9,756.25	......	1,485.53
2,275.07	3,605.07	1,334.55	803.03	14,401.19	16,350.46	1,949.27	......
2,167.93	1,885.41	1,346.50	419.98	12,175.77	12,593.04	417.27	......
......	......	......	......	......	......	......	......
......	......	......	......	......	......	......	......
61,721.90	45,190.96	31,705.13	10,066.12	266,944.59	263,578.21	12,076.39	15,442.77

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

GEORGIAN BAY

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Alliston	June 1918	436.28			436.28
Arthur	Dec. 1916	1,118.34			1,118.34
Barrie	April 1913	11,072.30			11,072.30
Beaverton	Nov. 1914	1,011.74			1,011.74
Beeton	Aug. 1918	248.79			248.79
Bradford	Oct. 1918	1,731.49			1,731.49
Brechin	Jan. 1915	608.86			608.86
Cannington	Nov. 1914	696.76			696.76
Chatsworth	Dec. 1915	269.93			269.93
Chesley	July 1916	2,188.80			2,188.80
Coldwater	Mar. 1913	869.23			869.23
Collingwood	Mar. 1913	4,429.55			4,429.55
Cookstown	May 1918	548.74			548.74
Creemore	Nov. 1914	280.18			280.18
Dundalk	Dec. 1915	1,242.66			1,242.66
Durham	Dec. 1915	1,700.54			1,700.54
Elmvale	June 1913	475.96			475.96
Elmwood	April 1918	276.31			276.31
Flesherton	Dec. 1915	450.40			450.40
Grand Valley	Dec. 1916	700.02			700.02
Gravenhurst	Nov. 1915	1,754.42			1,754.42
Hanover	Sept. 1916	3,820.71			3,820.71
Holstein	May 1916	1,822.99		33.59	1,701.85
Huntsville	Sept. 1916	1,456.30			1,456.30
Kincardine	Mar. 1921	4,582.98			4,582.98
Kirkfield	June 1920	91.96		93.13	185.09
Lucknow	Jan. 1921	2,581.44			2,581.44
Markdale	Mar. 1916	542.08			542.08
Meaford	Jan. 1924	2,705.86			2,705.86
Midland	July 1911	12,036.72			12,036.72
Mildmay	Dec. 1932	856.09			856.09
Mount Forest	Dec. 1915	2,154.11			2,154.11
Neustadt	Dec. 1918	4,622.20			2,276.44
Orangeville	July 1916	2,777.05			2,777.05
Owen Sound	Dec. 1915	9,401.72			9,401.72
Paisley	Sept. 1923	916.37			916.37
Penetanguishene	July 1911	2,858.35			2,858.35
Port Elgin	Mar. 1931		839.03	839.03	
Port McNicholl	Jan. 1915	404.99			404.99
Port Perry	Sept. 1922	1,852.94			1,852.94
Priceville	Mar. 1920	412.90			412.90
Ripley	Jan. 1921	565.62			565.62
Rosseau	July 1931	670.89			670.89
Shelburne	July 1916	1,810.61			1,810.61
Southampton	Feb. 1931		698.55	698 55	

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
7.44		1,833.34		1,840.78	
14.91		592.10		607.01	
159.33		6,312.58		6,471.91	
17.86		543.61		561.47	
4.70		915.98		920.68	
32.21		1,088.32		1,120.53	
14.18		204.36		218.54	
11.53		282.96		294.49	
5.36			70.01		64.65
36.78		837.03		873.81	
15.91		900.17		916.08	
70.80		3,010.63		3,081.43	
9.96		309.61		319.57	
5.05		453.88		458.93	
22.17		499.31		521.48	
30.38		1,177.19		1,207.57	
7.28		195.98		203.26	
4.47		182.59		187.06	
8.08		268.80		276.88	
10.26		204.25		214.51	
30.89		1,870.90		1,901.79	
63.57		2,098.55		2,162.12	
44.18		344.51		543.42	
24.19		968.40		992.59	
84.95			617.25		532.30
1.93			7.53		5.60
40.77		484.89		525.66	
9.52		441.52		451.04	
48.63		692.80		741.43	
214.63		4,991.21		5,205.84	
15.51		410.71		426.22	
38.59		2,824.17		2,862.76	
142.87		238.93		2,727.56	
49.24		1,849.77		1,899.01	
164.22		8,632.50		8,796.72	
16.49		316.97		333.46	
47.80		2,394.77		2,442.57	
	14.76		323.50		338.26
6.37		218.34		224.71	
33.11		1,165.84		1,198.95	
11.63		103.78		115.41	
10.16		110.10		120.26	
12.99		237.78		250.77	
33.13		528.31		561.44	
	10.99		201.47		212.46

GEORGIAN BAY

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Stayner	Oct. 1913	1,117.24			1,117.24
Sunderland	Nov. 1914	338.11			338.11
Tara	Feb. 1918	676.36			676.36
Teeswater	Dec. 1920	917.26			917.26
Thornton	Nov. 1918	502.98			502.98
Tottenham	Oct. 1918	5.93			5.93
Uxbridge	Sept. 1922	1,690.04			1,690.04
Victoria Harbour	July 1914	372.33			372.33
Walkerton	Feb. 1931	2,353.53			2,353.53
Waubaushene	Dec. 1914	217.25			217.25
Wiarton	May 1931	1,977.31			1,977.31
Windermere	June 1930	566.07			566.07
Wingham	Dec. 1920	2,530.73			2,530.73
Woodville	Nov. 1914	408.61			408.61
Totals—Municipalities		104,729.93	1,537.58	1,664.30	102,356.16
RURAL POWER DISTRICTS					
Alliston R.P.D.	Nov. 1929	2,836.50		40.00	
Arthur R.P.D.	Dec. 1929	73.34			
Bala R.P.D.	Jan. 1930		3,037.31	240.00	
Barrie R.P.D.	Aug. 1923		1,323.14	75.00	
Baysville R.P.D.	July 1932		5,989.80	95.00	
Beaumaris R.P.D.	June 1928	996.81			49.23
Beaverton R.P.D.	Oct. 1926		7,868.60	80.00	
Beeton R.P.D.	Sept. 1926		800.70		
Bradford R.P.D.	Aug. 1929		4,097.08	20.00	
Bruce R.P.D.	Oct. 1931	820.75		65.00	
Buckskin R.P.D.	July 1928		1,939.05	20.00	
Cannington R.P.D.	May 1924	2,261.77			10.00
Chatsworth R.P.D.	Dec. 1928		32.25	105.00	
Cookstown R.P.D.	Dec. 1930	161.54			
Creemore R.P.D.	Dec. 1930		4,748.77	35.00	
Dundalk R.P.D.	Jan. 1936				
Elmvale R.P.D.	Jan. 1924	885.85			10.00
Flesherton R.P.D.	Feb. 1922		1,589.60		
Gravenhurst R.P.D.	June 1929		170.05		5.00
Hawkestone R.P.D.	Aug. 1930		2,703.42	370.81	74.00
Holstein R.P.D.	Mar. 1929		142.13		
Huntsville R.P.D.	Aug. 1931		3,915.09		
Innisfil R.P.D.	Feb. 1928		1,478.10		
Lucknow R.P.D.	Feb. 1924		51.78		
Mariposa R.P.D.	Sept. 1923	11,977.45			70.00

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

SYSTEM *G.B.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
22.65		787.54		810.19	
5.76		182.71		188.47	
12.89		192.19		205.08	
16.71			28.11		11.40
6.71		163.17		169.88	
0.10		572.19		572.29	
29.74		913.46		943.20	
5.99			121.47		115.48
42.52		1,521.55		1,564.07	
3.70		346.32		350.02	
34.27		1,609.59		1,643.86	
9.47		341.86		351.33	
46.26			361.59		315.33
6.90		184.02		190.92	
1,877.70	25.75	57,552.04	1,730.93	61,769.03	1,595.48
115.06		101.71		3,093.27	
2.93		56.14		132.41	
	111.89		1,630.70		4,539.90
	49.93	1,442.90		144.83	
	235.79		988.57		7,119.16
38.10		69.53		1,055.21	
	311.54		505.31		8,605.45
	32.03		246.51		1,079.24
	163.08		808.81		5,048.97
35.43		1,588.94		2,510.12	
	76.76		437.63		2,433.44
90.07			488.72	1,853.12	
	2.91		90.70		20.86
6.46			11.09	156.91	
	188.55		870.67		5,772.99
			106.70		106.70
35.03		715.28		1,626.16	
	63.58		255.99		1,909.17
	7.00		68.83		250.88
	94.83	0.88			2,500.56
	5.69		91.21		239.03
	156.60		968.79		5,040.48
	59.12	2,227.20		689.98	
	2.07		30.81		84.66
476.30		2,000.88		14,384.63	

GEORGIAN BAY

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Rural Power District	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Markdale R.P.D.	July 1924		2,300.37	45.00	
Meaford R.P.D.	Oct. 1928		126.03		
Medonte R.P.D.	July 1930		1,438.60		100.00
Midland R.P.D.	Nov. 1930		795.23	15.00	
Minden R.P.D.	Dec. 1935				
Neustadt R.P.D.	Nov. 1926		94.51		
Nottawasaga R.P.D.	Jan. 1922	2,395.35			
Orangeville R.P.D.	Aug. 1927		3,661.48		40.00
Owen Sound R.P.D.	Mar. 1931		717.49		45.00
Port Perry R.P.D.	Dec. 1922		4,692.96	60.00	
Ripley R.P.D.	Feb. 1922		1,961.63	10.00	
Sauble R.P.D.	Oct. 1931		1,940.12	165.00	
Shelburne R.P.D.	Feb. 1926		4,777.11	85.00	
Sparrow Lake R.P.D.	Oct. 1925	25.48			55.00
Tara R.P.D.	Jan. 1925		819.50		25.00
Thornton R.P.D.	Aug. 1930		1,945.22	155.00	
Tottenham R.P.D.	April 1936				
Utterson R.P.D.	June 1930	1,221.69		80.00	
Uxbridge R.P.D.	Sept. 1925		8,631.53		70.00
Wasaga Beach R.P.D.	July 1923	17,042.62			255.00
Wroxeter R.P.D.	Feb. 1929		778.95	100.00	
Totals—Rural power districts		40,699.15	74,567.60	1,860.81	808.23
Totals—Municipalities		104,729.93	1,537.58	1,664.30	102,356.16
Totals—Rural power districts		40,699.15	74,567.60	1,860.81	808.23
Grand totals		145,429.08	76,105.18	3,525.11	103,164.39

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

SYSTEM *G.B.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	90.21		862.82		3,208.40
	5.04		147.48		278.55
	61.54		992.19		2,592.33
	31.21		1,235.83		2,047.27
		86.18		86.18	
	3.78	60.70			37.59
95.81		120.36		2,611.52	
	148.06		437.00		4,286.54
	30.50		75.47		868.46
	185.32	868.45			3,949.83
	78.07		527.62		2,557.32
	71.00		49.01		1,895.13
	187.68		900.20		5,779.99
1.18		205.71		177.37	
	33.78		898.54		1,776.82
	71.61		197.27		2,059.10
			32.77		32.77
52.07		164.99		1,518.75	
	348.06		1,485.53		10,535.12
671.50		1,949.27		19,408.39	
	27.16	417.27			288.84
1,619.94	2,934.39	12,076.39	15,442.77	49,448.85	86,945.55
1,877.70	25.75	57,552.04	1,730.93	61,769.03	1,595.48
1,619.94	2,934.39	12,076.39	15,442.77	49,448.85	86,945.55
3,497.64	2,960.14	69,628.43	17,173.70	111,217.88	88,541.03

GEORGIAN BAY SYSTEM *G.B.—SINKING FUND*

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder as part of the cost of power delivered therero, together with the proportionate share of other Sinking Funds, provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Municipality	Period of years ending Oct. 31, 1936	Amount
		$ c.
Alliston	13 years	15,967.66
Arthur	15 "	14,422.99
Barrie	18 "	103,028.58
Beaverton	17 "	15,612.00
Beeton	13 "	11,663.93
Bradford	13 "	13,146.98
Brechin	17 "	5,998.22
Cannington	17 "	11,798.25
Chatsworth	16 "	3,106.58
Chesley	15 "	25,990.76
Coldwater	18 "	10,433.72
Collingwood	18 "	103,407.17
Cookstown	13 "	3,760.01
Creemore	17 "	8,830.78
Dundalk	16 "	8,906.20
Durham	16 "	23,380.61
Elmvale	18 "	11,539.23
Elmwood	13 "	2,911.98
Flesherton	16 "	4,947.39
Grand Valley	15 "	8,797.19
Gravenhurst	16 "	18,151.46
Hanover	15 "	60,687.98
Holstein	15 "	1,978.07
Huntsville	15 "	41,910.63
Kincardine	12 "	28,207.77
Kirkfield	12 "	2,341.70
Lucknow	12 "	13,505.34
Markdale	15 "	7,148.40
Meaford	12 "	19,401.49
Midland	18 "	163,382.37
Mildmay	4 "	1,254.59
Mount Forest	16 "	22,666.31
Neustadt	13 "	5,079.53
Orangeville	15 "	30,569.49
Owen Sound	16 "	143,695.39
Paisley	12 "	7,679.63
Penetanguishene	20 "	46,942.49
Port Elgin	6 "	5,091.15
Port McNicholl	17 "	4,554.98
Port Perry	12 "	11,596.85
Priceville	12 "	672.24
Ripley	12 "	5,424.57
Rosseau	6 "	1,887.68
Shelburne	15 "	13,814.47
Southampton	6 "	4,727.94
		$ c.
Stayner	18 years	11,861.60
Sunderland	17 "	7,823.90
Tara	13 "	6,176.73
Teeswater	12 "	8,742.34
Thornton	13 "	2,447.86
Tottenham	13 "	7,693.92
Uxbridge	12 "	12,256.65
Victoria Harbour	17 "	4,871.92
Walkerton	6 "	8,785.27
Waubaushene	17 "	2,798.57
Wiarton	6 "	7,235.51
Windermere	7 "	1,428.15
Wingham	12 "	25,437.64
Woodville	17 "	7,755.16
Total—Municipalities		$1,185,337.97
RURAL POWER DISTRICTS		
Alliston R.P.D.	7 years	3,807.84
Arthur R.P.D.	7 "	270.51
Bala R.P.D.	7 "	4,902.37
Barrie R.P.D.	14 "	12,333.59
Baysville R.P.D.	5 "	2,714.33
Beaumaris R.P.D.	9 "	6,856.67
Beaverton R.P.D.	11 "	5,538.46
Beeton R.P.D.	11 "	236.27
Bradford R.P.D.	8 "	2,387.82
Bruce R.P.D.	6 "	4,309.11
Buckskin R.P.D.	9 "	839.18
Cannington R.P.D.	13 "	3,943.89
Chatsworth R.P.D.	8 "	444.40
Cookstown R.P.D.	6 "	50.95
Creemore R.P.D.	6 "	2,580.51
Dundalk R.P.D.	1 "	41.09
Elmvale R.P.D.	13 "	3,433.76
Flesherton R.P.D.	15 "	719.96
Gravenhurst R.P.D.	8 "	925.75
Hawkestone R.P.D.	7 "	1,875.78
Holstein R.P.D.	8 "	58.08
Huntsville R.P.D.	6 "	2,327.84
Innisfil R.P.D.	9 "	9,660.01
Lucknow R.P.D.	11 "	43.55
Mariposa R.P.D.	14 "	10,491.35

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

GEORGIAN BAY SYSTEM *G.B.—SINKING FUND*

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder as part of the cost of power delivered thereto, together with the proportionate share of other Sinking Funds, provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Rural power district	Period of years ending Oct. 31, 1936	Amount
		$ c.
Markdale R.P.D.	13 years	1,738.81
Meaford R.P.D.	8 "	132.11
Medonte R.P.D.	7 "	1,025.27
Midland R.P.D.	6 "	1,488.67
Minden R.P.D.	1 "	31.83
Neustadt R.P.D.	10 "	58.54
Nottawasaga R.P.D.	15 "	3,290.26
Orangeville R.P.D.	10 "	2,752.53
Owen Sound R.P.D.	6 "	861.74
Port Perry R.P.D.	14 "	6,891.00
Ripley R.P.D.	11 "	654.80
Sauble R.P.D.	6 "	644.86
Shelburne R.P.D.	11 "	1,765.92
Sparrow Lake R.P.D.	12 "	6,939.85
Tara R.P.D.	12 years	3,345.76
Thornton R.P.D.	7 "	850.57
Tottenham R.P.D.	1 "	2.95
Utterson R.P.D.	7 "	2,937.74
Uxbridge R.P.D.	12 "	6,975.02
Wasaga Beach R.P.D.	14 "	12,274.94
Wroxeter R.P.D.	7 "	7,180.10
Total—Rural power districts.		$142,636.34
Total—Municipalities		$1,185,337.97
Total—Rural power districts.		142,636.34
Grand total		$1,327,974.31

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

GEORGIAN BAY SYSTEM—RURAL LINES

Statement showing Interest, Depreciation and Obsolescence, Contingencies and Sinking Fund charged by the Commission to the Municipalities which operate the respective rural lines for the year ending October 31, 1936

Operated by	Capital cost	Interest	Provision for depreciation and obsolescence	Provision for contingencies	Provision for sinking fund	Total interest, depreciation and obsolescence contingencies and sinking fund charged
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Brechin	922.02	48.22	18.44	9.22	16.60	92.48
Flesherton	1,885.41	105.77	37.71	18.85	33.94	196.27
Totals	2,807.43	153.99	56.15	28.07	50.54	288.75

GEORGIAN BAY SYSTEM—RURAL LINES

Statement showing the total Sinking Fund paid in respect of each line, together with interest allowed thereon to October 31, 1936

Lines operated by	Period of years ending October 31, 1936	Amount
		$ c.
Brechin	18 years	393.55
Flesherton	19 "	716.31
Total		1,109.86

EASTERN ONTARIO

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horsepower supplied in year after correction for power factor	Share of operating		
	To Oct. 31 1935	To Oct. 31 1936			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Alexandria	63.00	58.50	85,321.17	188.7	1,385.96	2,080.74	3,938.33
Apple Hill	55.00	50.50	11,866.57	35.6	261.47	351.34	543.73
Athens	55.00	50.50	29,701.03	86.5	635.32	819.05	1,364.59
Bath	78.00	72.00	18,138.58	29.6	217.41	396.55	835.00
Belleville	35.00	32.00	835,575.15	4,406.6	32,365.47	30,456.20	38,027.51
Bloomfield	56.00	52.00	24,975.24	69.3	508.99	839.42	1,146.24
Bowmanville	38.00	35.00	404,033.26	1,884.2	13,839.02	15,035.38	18,344.59
Brighton	40.00	38.00	55,344.40	245.0	1,799.47	2,017.56	2,536.02
Brockville	32.00	30.00	461,264.64	2,749.8	20,196.65	16,496.29	21,075.34
Cardinal	38.00	34.50	30,707.72	174.0	1,278.00	1,335.89	1,399.10
Carleton Place	35.00	33.50	245,836.61	1,265.8	9,297.01	7,802.73	11,258.20
Chesterville	44.00	39.50	46,912.96	205.6	1,510.08	1,720.06	2,160.30
Cobden		70.00	29,656.76	53.3	391.48	930.10	1,343.78
Cobourg	38.00	35.00	293,952.05	1,413.2	10,379.63	12,467.98	13,474.34
Colborne	40.00	37.50	30,910.98	131.5	965.84	1,103.00	1,407.94
Deseronto	53.00	53.00	43,993.22	126.0	925.44	1,337.97	2,028.69
Finch	61.00	55.00	20,528.80	59.0	433.34	597.54	944.67
Hastings	50.00	46.50	27,145.44	85.3	626.51	923.16	1,247.27
Havelock	53.00	51.00	49,151.94	132.8	975.39	1,492.86	2,262.27
Kemptville	42.00	39.00	75,238.38	313.5	2,302.59	2,653.01	3,451.38
Lakefield	46.00	44.00	63,142.10	224.5	1,648.90	2,011.36	2,901.31
Lanark	47.00	43.00	21,876.17	73.0	536.17	647.52	1,002.59
Lancaster	80.00	71.50	21,053.31	43.8	321.70	665.78	969.19
Lindsay	42.00	38.00	425,526.07	1,888.2	13,868.40	19,833.07	19,531.75
Madoc	46.00	43.50	41,231.70	151.8	1,114.94	2,081.48	1,899.94
Marmora	49.00	43.50	24,962.11	89.5	657.36	1,159.93	1,144.43
Martintown	50.00	46.50	6,812.70	26.5	194.64	420.75	308.93
Maxville	60.00	55.50	33,990.38	86.7	636.79	959.79	1,555.03
Napanee	38.00	35.50	205,253.71	982.3	7,214.77	7,447.48	9,411.35
Norwood	43.00	40.50	21,793.86	91.9	674.98	1,051.56	997.21
Oshawa	36.00	34.50	2,602,435.37	12,243.3	89,924.23	96,651.24	119,310.33
Ottawa	25.00	23.50	913,725.86	8,401.7	61,708.55	42,650.20	41,342.95
Ottawa				18,877.9	207,657.09	114.24	44.86
Perth	33.00	31.00	225,932.61	1,267.0	9,305.82	8,834.27	10,332.42
Peterborough	32.00	30.00	1,274,808.95	7,194.3	52,840.48	42,846.61	58,297.64
Picton	48.00	44.00	245,091.04	819.5	6,019.04	7,783.67	11,292.78
Port Hope	39.00	36.50	268,676.97	1,316.7	9,670.86	13,856.50	12,315.08
Prescott	32.00	29.50	129,987.18	834.0	6,125.54	5,251.81	5,927.02
Richmond	55.00	55.00	17,690.37	44.9	329.78	596.50	812.25
Russell	64.00	61.50	18,999.26	50.3	369.44	557.36	874.43

SYSTEM *E.O.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from or (billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,468.50	269.29	857.79	328.68	10,329.29	11,039.94	710.65	....
191.34	44.28	116.71	62.01	1,570.88	1,797.34	226.46	....
483.60	97.87	293.41	150.67	3,844.51	4,366.10	521.59	....
300.44	52.78	183.74	51.56	2,037.48	2,128.20	90.72	....
7,618.39	2,740.23	7,817.07	7,675.57	126,700.44	141,011.17	14,310.73	....
355.58	77.12	247.07	120.71	3,295.13	3,604.43	309.30	....
4,154.04	1,293.35	3,814.49	3,281.96	59,762.83	65,947.26	6,184.43	....
604.96	193.46	530.12	426.75	8,108.34	9,309.02	1,200.68	....
5,780.96	1,783.64	4,276.91	4,789.70	74,399.49	82,493.95	8,094.46	....
393.99	127.36	285.47	303.08	5,122.89	6,003.83	880.94	....
3,358.93	931.78	2,321.27	2,204.82	37,174.74	42,403.94	5,229.20	....
683.63	173.49	452.14	358.12	7,057.82	8,121.49	1,063.67	....
515.49	93.25	91.49	92.84	3,458.43	3,727.50	269.07	....
2,993.25	980.16	2,796.53	2,461.56	45,553.45	49,462.20	3,908.75	....
344.82	108.47	295.12	229.05	4,454.24	4,930.29	476.05	....
622.68	163.54	436.68	219.47	5,734.47	6,676.66	942.19	....
335.85	68.69	203.28	102.77	2,686.14	3,243.60	557.46	....
367.31	90.55	267.07	148.58	3,670.45	3,965.64	295.19	....
709.67	158.19	488.34	231.32	6,318.04	6,771.33	453.29	....
1,117.08	269.95	725.05	546.07	11,065.13	12,227.13	1,162.00	....
802.69	199.76	616.52	391.04	8,571.58	9,878.63	1,307.05	....
345.68	78.72	213.87	127.15	2,951.70	3,140.76	189.06	....
364.53	67.12	211.57	76.29	2,676.18	3,134.64	458.46	....
4,656.66	1,340.97	4,082.58	3,288.93	66,602.36	71,752.53	5,150.17	....
516.17	137.63	402.86	264.41	6,417.43	6,602.54	185.11	....
314.76	91.20	243.02	155.89	3,766.59	3,892.85	126.26	....
101.22	25.15	65.18	46.16	1,162.03	1,231.44	69.41	....
565.27	112.47	336.49	151.02	4,316.86	4,814.14	497.28	....
2,100.14	691.41	1,954.13	1,711.01	30,530.29	34,872.50	4,342.21	....
246.71	78.93	209.25	160.07	3,418.71	3,722.28	303.57	....
27,039.48	8,200.74	24,810.88	21,325.81	387,262.71	422,392.38	35,129.67	....
7,747.58	3,884.20	7,848.22	14,634.43	179,816.13	197,439.73	17,623.60	....
19.29	4.82	10.16	....	207,850.46	207,850.46	....	....
2,959.36	879.65	2,111.40	2,206.91	36,629.83	39,276.02	2,646.19	....
10,809.31	3,890.32	11,904.84	12,531.29	193,120.49	215,829.77	22,709.28	....
3,232.06	743.69	2,409.49	1,427.43	32,908.16	36,057.24	3,149.08	....
2,686.00	883.67	2,551.41	2,293.47	44,256.99	48,061.03	3,804.04	....
1,553.35	514.80	1,191.87	1,452.69	22,017.08	24,603.96	2,586.88	....
295.71	55.70	175.83	78.21	2,343.98	2,466.72	122.74	....
316.02	62.65	188.94	87.61	2,456.45	3,092.91	636.46	....

EASTERN ONTARIO

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
	To Oct. 31 1935	To Oct. 31 1936			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.	$ c.	$ c.		$ c.	$ c.	$ c.
Smiths Falls	30.00	28.00	276,976.00	1,832.6	13,460.03	10,873.36	12,628.37
Stirling	33.00	30.00	41,857.03	238.9	1,754.66	1,963.15	1,913.99
Trenton	30.00	27.50	461,545.22	2,887.7	21,209.49	15,316.02	21,070.45
Tweed	59.00	55.50	61,413.17	173.0	1,270.65	2,927.03	2,832.37
Warkworth	50.00	45.50	19,390.87	64.7	475.21	698.45	878.59
Wellington	45.00	41.50	48,235.38	173.6	1,275.05	1,549.95	2,214.79
Westport	75.00	70.00	38,188.06	72.5	532.50	708.88	1,761.64
Whitby	38.00	34.50	208,306.45	967.7	7,107.53	7,458.36	9,556.25
Williamsburg	36.00	32.50	33,390.03	189.6	1,392.57	1,404.41	1,456.21
Winchester	40.00	36.00	53,457.47	264.8	1,944.90	2,034.99	2,449.52
Totals—Municipalities			10,626,004.30	75,228.2	621,537.14	401,212.55	485,822.96
RURAL POWER DISTRICTS							
Alexandria R.P.D.—Hawkesbury E. and Lochiel twps.			16,652.37	35.5	260.74	509.07	764.99
Arnprior R.P.D.—Fitzroy and March twps.			7,712.21	48.6	356.96	265.87	352.00
Belleville R.P.D.—Huntingdon Sidney, Thurlow and Tyendinaga twps.			66,962.90	343.4	2,522.19	2,396.33	3,066.65
Bowmanville R.P.D.—Darlington twp.			25,362.88	114.9	843.91	987.17	1,148.88
Brighton R.P.D.—Brighton, Cramahe and Murray twps.			5,263.35	23.3	171.13	178.62	241.15
Brockville R.P.D.—Augusta, Elizabethtown, Escott Front, Leeds and Lansdowne Front, Leeds and Lansdowne Rear, Yonge and Escott Rear and Yonge Front twps.			60,069.32	312.3	2,293.77	1,957.42	2,747.49
Campbellford R.P.D.—Rawdon and Seymour twps.			13,098.75	74.1	544.25	443.97	599.06
Carleton Place R.P.D.—Ramsay twp.			....	....	22.92	....	....
Chesterville R.P.D.—Cambridge, Finch, Osgoode, Osnabruck, Russell, Williamsburg and Winchester twps.			57,422.68	228.4	1,677.55	1,815.68	2,646.34
Cobourg R.P.D.—Alnwick, Haldimand, Hamilton and Hope twps.			59,508.34	281.6	2,068.29	2,233.60	2,723.35
Colborne R.P.D.—Cramahe and Haldimand twps.			25,452.27	102.7	754.31	739.37	1,160.56
Fenelon Falls R.P.D.—Bexley, Fenelon, Laxton, Digby, Longford, Ops, Sommerville and Verulam twps.			32,518.89	127.5	936.46	1,406.03	1,490.98

SYSTEM *E.O.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from or (billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
3,284.14	1,113.19	2,529.42	3,192.09	47,080.60	51,313.48	4,232.88	....
349.52	129.52	390.37	416.12	6,917.33	7,166.25	248.92	....
3,336.86	1,422.73	4,250.97	5,029.90	71,636.42	79,413.02	7,776.60	....
875.15	186.65	610.19	301.34	9,003.38	9,602.38	599.00	....
249.59	63.11	187.29	112.70	2,664.94	2,942.30	277.36	....
608.35	154.23	470.24	302.38	6,574.99	7,204.03	629.04	....
672.69	126.28	385.84	126.28	4,314.11	5,072.63	758.52	....
2,191.39	628.02	1,989.58	1,685.57	30,616.70	33,386.23	2,769.53	....
399.92	129.78	295.59	330.25	5,408.73	6,162.25	753.52	....
737.33	208.07	506.96	461.24	8,343.01	9,532.80	1,189.79	....
111,777.44	35,822.63	99,654.71	98,152.98	1,853,980.41	2,021,138.92	167,158.51	....
286.62	53.25	166.83	61.84	2,103.34	2,103.34	see page	259
94.45	28.66	43.78	84.65	1,226.37	1,226.37	"	"
638.08	224.53	632.54	598.14	10,078.46	10,078.46	"	"
266.31	82.11	239.45	200.14	3,767.97	3,767.97	"	"
57.52	18.39	50.40	40.58	757.79	757.79	"	"
808.77	226.92	565.88	543.98	9,144.23	9,144.23	"	"
110.73	42.92	122.30	129.07	1,992.30	1,992.30	"	"
....	....	....	....	22.92	22.92	"	"
865.44	210.72	558.10	397.84	8,171.67	8,171.67	"	"
612.96	199.31	565.93	490.50	8,893.94	8,893.94	"	"
295.51	91.27	244.29	178.89	3,464.20	3,364.20	"	"
388.46	108.15	314.64	222.08	4,866.80	4,866.80	"	"

EASTERN ONTARIO

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Iroquois R.P.D.—Gower S., Matilda, Mountain, Oxford, Williamsburg and Winchester twps	60,067.29	454.9	3,341.14	2,420.45	2,731.21
Kemptville R.P.D.—Oxford twp	6,180.30	23.9	175.54	238.00	279.10
Kingston R.P.D.—Bedford, Ernestown, Hinchinbrooke, Kingston, Leeds and Lansdowne Front, Leeds and Lansdowne Rear, Loughborough, Oso, Pittsburgh, Portland and Storrington twps	91,116.05	449.7	4,236.09	3,149.69	4,175.22
Lakefield R.P.D.—Burleigh and Anstruther, Douro, Harvey and Smith twps	13,069.71	52.9	388.54	376.14	596.65
Marmora R.P.D.—Marmora and Lake twp	278.90	1.0	7.34	9.85	12.80
Martintown R.P.D.—Charlottenburg and Lancaster twps	21,801.23	72.0	528.82	765.91	1,000.10
Maxville R.P.D.—Caledonia, Kenyon, Plantagenet N., Plantagenet S. and Roxborough twps	68,960.35	184.6	1,355.84	1,515.31	3,156.22
Millbrook R.P.D.—Cavan, Manvers and Monaghan S. twps	14,131.25	47.5	348.88	639.88	643.96
Napanee R.P.D.—Camden E., Ernestown, Fredericksburg N., Fredericksburg S., Hungerford, Portland, Richmond, Sheffield and Tyendinaga twps	57,080.82	230.0	1,689.29	1,704.91	2,619.53
Nepean R.P.D.—Clarence, Cumberland, Gloucester, Goulburn, Gower N., March, Marlborough, Nepean and Osgoode twps	88,945.48	683.8	5,022.35	3,482.95	4,042.80
Newcastle R.P.D.—Clarke, Darlington and Manvers twps	17,231.35	63.9	469.33	553.77	780.16
Norwood R.P.D.—Asphodel, Belmont and Methuen, Dummer, Percy and Seymour twps	7,010.58	21.5	157.91	267.50	318.03
Omemee R.P.D.—Emily and Ops twps	1,268.68	4.9	35.99	42.60	58.16
Oshawa R.P.D.—Darlington, Pickering, Uxbridge, Whitby and Whitby E. twps	168,166.29	775.5	5,695.87	7,732.03	7,709.07
Perth R.P.D.—Bathurst, Burgess N., Dalhousie and Sherbrooke N., Drummond, Elmsley N. and Elmsley S. twps	10,545.81	41.0	513.90	360.43	480.09

SYSTEM *E.O.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from or (billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
631.52	236.81	536.50	792.36	10,689.99	10,689.99	see page	259
92.03	22.30	58.90	41.63	907.50	907.50	"	"
985.80	294.82	871.83	711.54	14,424.99	14,424.99	"	"
151.73	39.70	125.57	92.14	1,770.47	1,770.47	"	"
3.53	1.02	2.72	1.74	39.00	39.00	"	"
344.16	76.39	213.49	125.41	3,054.28	3,054.28	"	"
1,137.03	236.36	681.44	321.54	8,403.74	8,403.74	"	"
182.77	49.56	137.26	82.74	2,085.05	2,085.05	"	"
670.64	192.05	551.73	400.62	7,828.77	7,828.77	"	"
922.13	386.22	792.27	1,191.07	15,839.79	15,839.79	"	"
208.84	58.81	165.15	111.30	2,347.36	2,347.36	"	"
94.14	23.98	68.14	37.45	967.15	967.15	"	"
15.30	4.36	12.29	8.53	177.23	177.23	"	"
1,778.01	525.04	1,605.93	1,350.79	26,396.74	26,396.74	"	"
158.43	44.11	101.32	71.41	1,729.69	1,729.69	"	"

EASTERN ONTARIO

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Rural power district	Share of capital cost of system on which interest and fixed charges are payable	Average horse-power supplied in year after correction for power factor	Share of operating		
			Cost of power purchased	Operating, maintenance and administrative expenses	Interest
	$ c.		$ c.	$ c.	$ c.
Peterborough R.P.D.—Cavan, Douro, Monaghan N., Monaghan S., Otonabee and Smith twps.	105,849.60	568.7	4,176.97	4,072.46	4,844.47
Prescott R.P.D. — Augusta, Edwardsburg and Matilda twps.	21,822.88	129.0	947.48	1,380.32	992.28
Renfrew R.P.D.—Admaston, Bromley, Horton, Ross and Westmeath twps.	17,481.45	51.4	377.52	542.83	793.60
Smiths Falls R.P.D.—Bastard and Burgess S., Crosby S., Kitley, Montague and Wolford twps.	42,302.10	195.2	1,433.71	1,227.39	1,940.34
Stirling R.P.D.—Rawdon and Sidney twps.	9,336.30	48.5	356.22	510.48	422.89
Trenton R.P.D.—Brighton, Murray and Sidney twps.	34,192.39	196.3	1,441.78	1,549.62	1,559.09
Warkworth R.P.D.—Percy twp.	819.51	3.7	27.18	29.15	36.79
Wellington R.P.D.—Ameliasburg, Athol, Hallowell, Hillier, Murray and Sophiasburg twps.	67,811.53	237.1	1,741.44	2,146.49	3,111.04
Williamsburg R.P.D.—Matilda and Williamsburg twps.	12,855.87	73.0	536.17	515.82	560.68
Totals—Rural power districts	1,308,349.68	6,302.3	47,457.78	48,167.11	59,805.73
Totals—Municipalities	10,626,004.30	75,228.2	621,537.14	401,212.55	485,822.96
Totals—Rural power districts	1,308,349.68	6,302.3	47,457.78	48,167.11	59,805.73
Totals—Companies	4,664,205.54	23,302.6	174,551.95	158,327.96	213,571.25
Totals—Local electric distribution systems	580,669.96	1,845.4	13,554.04	37,609.23	26,678.19
Totals—Local gas distribution system	26,413.01	....	....	16,486.76	1,228.29
Totals—Pulp mill	330,257.43	1,668.1	12,251.81	33,976.09	15,131.07
	17,535,899.92				
Non-operating capital	4,283.50				
Grand totals	17,540,183.42	108,346.6	869,352.72	695,779.70	802,237.49

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

costs and fixed charges			Cost in excess of revenue from power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from or (billed against) each municipality by the Commission	Amounts remaining to be credited or charged to each municipality upon ascertainment of the actual cost of power by annual adjustment	
Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund				Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
956.01	332.81	994.53	990.58	16,367.83	16,367.83	see page	259
272.74	87.77	201.44	224.70	4,106.73	4,106.73	“	“
281.09	58.51	69.58	89.53	2,212.66	2,212.66	“	“
605.80	177.09	404.22	340.01	6,128.56	6,128.56	“	“
85.72	29.98	87.02	84.48	1,576.79	1,576.79	“	“
281.35	110.50	317.67	341.92	5,601.93	5,601.93	“	“
8.48	2.88	7.66	6.44	118.58	118.58	“	“
867.93	219.79	661.74	412.99	9,161.42	9,161.42	“	“
153.98	49.96	113.81	127.15	2,057.57	2,057.57	“	“
15,314.01	4,547.05	12,286.35	10,905.78	198,483.81	198,483.81	“	“
111,777.44	35,822.63	99,654.71	98,152.98	1,853,980.41	2,021,138.92	167,158.51	....
15,314.01	4,547.05	12,286.35	10,905.78	198,483.81	198,483.81	....	....
49,669.23	15,276.14	50,605.26	(95,363.29)	566,638.50	566,638.50	....	....
8,602.81	1,359.38	2,457.71	17,828.58	108,089.94	108,089.94	....	....
....	....	....	(2,929.74)	14,785.31	14,785.31	....	....
2,149.21	879.34	2,572.31	(28,594.31)	38,365.52	38,365.52	....	....
187,512.70	57,884.54	167,576.34	....	2,780,343.49	2,947,502.00	167,158.51	....

EASTERN ONTARIO SYSTEM

Statement showing the costs of distribution of power within each Rural Power and the amounts remaining to be credited to certain Districts or charged to (by annual adjustment) of the actual costs

Rural power district	Total capital cost of each district, Provincial Government grant received and applied thereagainst, and the balance representing the investment by the Commission			Cost of power delivered to districts as shown in "cost of power" table preceding
	Total capital cost	Government grant	Commission's investment	
	$ c.	$ c.	$ c.	$ c.
Alexandria R.P.D.	30,037.32	14,854.78	15,182.54	2,103.34
Arnprior R.P.D.	14,537.72	7,025.23	7,512.49	1,226.37
Belleville R.P.D.	165,301.34	81,942.98	83,358.36	10,078.46
Bowmanville R.P.D.	50.941.05	25,470.52	25,470.53	3,767.97
Brighton R.P.D.	19,921.52	9,960.76	9,960.76	757.79
Brockville R.P.D.	*238,192.66	116,964.42	121,228.24	9,144.23
Campbellford R.P.D.	38,534.69	19,267.34	19,267.35	1,992.30
Carleton Place R.P.D.	897.79	448.89	448.90	22.92
Chesterville R.P.D.	*118,864.66	56,120.30	62,744.36	8,171.67
Cobourg R.P.D.	218,498.22	108,512.89	109,985.33	8,893.94
Colborne R.P.D.	64,790.92	32,395.46	32,395.46	3,464.20
Fenelon Falls R.P.D.	118,259.30	58,670.30	59,589.00	4,866.80
Iroquois R.P.D.	182,782.93	91,048.11	91,734.82	10,689.99
Kemptville R.P.D.	11,595.63	5,650.99	5,944.64	907.50
Kingston R.P.D.	326,361.86	159,134.73	167,227.13	14,424.99
Lakefield R.P.D.	*57,849.36	28,814.00	29,035.36	1,770.47
Marmora R.P.D.	5,421.08	2,710.54	2,710.54	39.00
Martintown R.P.D.	*51,777.82	25,585.83	26,191.99	3,054.28
Maxville R.P.D.	126,559.79	63,279.89	63,279.90	8,403.74
Millbrook R.P.D.	36,351.41	17,891.81	18,459.60	2,085.05
Napanee R.P.D.	*230,924.67	112,051.16	118,873.51	7,828.77
Nepean R.P.D.	*368,313.50	179,293.52	189,019.98	15,839.79
Newcastle R.P.D.	*43,613.58	20,876.09	22,737.49	2,347.36
Norwood R.P.D.	*19,938.37	9,660.46	10,277.91	967.15
Omemee R.P.D.	7,404.17	3,702.08	3,702.09	177.23
Oshawa R.P.D.	332,310.41	162,640.72	169,669.69	26,396.74
Perth R.P.D.	34,995.51	17,497.75	17,497.76	1,729.69
Peterborough R.P.D.	*203,723.07	101,640.19	102,082.88	16,367.83
Prescott R.P.D.	77,756.72	38,697.26	39,059.46	4,106.73
Renfrew R.P.D.	*54,404.43	24,767.20	29,637.23	2,212.66
Smiths Falls R.P.D.	*147,755.47	71,424.61	76,330.86	6,128.56
Sterling R.P.D.	*51,864.34	23,555.43	28,308.91	1,576.79
Trenton R.P.D.	*106,223.99	52,925.22	53,298.77	5,601.93
Warkworth R.P.D.	*2,466.28	1,046.37	1,419.91	118.58
Wellington R.P.D.	*213,532.75	106,285.40	107,247.35	9,161.42
Williamsburg R.P.D.	62,375.20	31,187.60	31,187.60	2,057.57
Total capital	3,835,079.53	1,883,000.83	1,952,078.70	
Non-operating capital	23,929.28	11,964.64	11,964.64	
Grand totals	3,859,008.81	1,894,965.47	1,964,043.34	198,483.81

Note—Items marked * include portions of transmission lines aggregating $32,006.83 used for purposes of rural power districts.

—RURAL POWER DISTRICTS *E.O.—RURAL OPERATING*

District, the revenues collected from (or charged to) customers within each District, the Municipalities comprising certain other Districts upon ascertainment in the year ending October 31, 1936

Distribution costs and fixed charges				Total cost	Revenue from power and light customers in each district	Amounts remaining to be credited to certain districts or charged to the municipalities comprising certain other districts	
Cost of operation, maintenance and administration	Interest	Provision for depreciation and obsolescence	Sinking fund			Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
995.50	697.52	519.26	157.94	4,473.56	3,876.33	....	597.23
528,24	344.74	250.94	78.06	2,428.35	3,200.09	771.74	....
4,726.31	3,704.72	2,763.54	838.88	22,111.91	25,743.67	3,631.76	....
995.69	1,164.85	876.71	263.76	7,068.98	8,565.43	1,496.45	....
571.70	440.15	331.27	99.67	2,200.58	2,501.25	300.67	....
9,388.69	5,546.90	4,100.18	1,256.02	29,436.02	31,725.70	2,289.68	....
1,258.38	891.24	670.78	201.81	5,014.51	4,316.70	....	697.81
19.35	20.88	15.72	4.73	83.60	64.64	....	18.96
4,752.48	2,786.91	1,981.60	631.05	18,323.71	18,398.87	75.16	....
6,233.03	4,901.09	3,662.97	1,109.78	24,800.81	24,340.17	....	460.64
3,109.13	1,475.45	1,110.47	334.09	9,493.34	8,377.91	....	1,115.43
2,549.45	2,655.16	1,982.29	601.22	12,654.92	12,432.06	....	222.86
5,226.17	4,247.51	3,184.80	961.78	24,310.25	28,487.30	4,177.05	....
303.85	274.95	201.80	62.26	1,750.36	2,012.47	262.11	....
12,747.78	7,220.67	5,206.20	1,635.02	41,234.66	41,505.33	270.67	....
1,018.52	1,290.04	967.05	292.11	5,338.19	4,835.39	....	502.80
134.44	31.51	23.72	7.13	235.80	132.13	....	103.67
1,854.34	1.174.41	873.30	265.92	7,222.25	8,121.99	899.74	....
4,159.62	2,849.41	2,144.56	645.21	18,202.54	17,056.33	....	1,146.21
1,094.44	842.94	624.48	190.87	4,837.78	5,095.04	257.26	....
5,660.79	5,309.62	3,851.21	1,202.29	23,852.68	23,420.46	....	432.22
11,962.77	8,481.83	6,219.37	1,920.59	44,424.35	49,657.61	5,233.26	....
1,054.72	1,050.00	757.69	237.76	5,447.53	6,455.34	1,007.81	....
557.06	471.71	344.23	106.82	2,446.97	2,031.31	....	415.66
52.47	170.31	128.18	38.56	566.75	408.84	....	157.91
12,896.09	7,566.66	5,573.10	1,713.35	54,145.94	58,702.66	4,556.72	....
1,112.06	797.47	600.20	180.58	4,420.00	3,095.13	....	1,324.87
6,798.97	4,586.33	3,444.08	1,038.50	32,235.71	35,360.07	3,124.36	....
3,250.33	1,809.50	1,355.56	409.74	10,931.86	10,779.18	....	152.68
2,188.51	1,180.77	822.38	267.37	6.671.69	5,413.30	....	1,258.39
5,275.44	3,457.22	2,516.55	782.85	18,160.62	19,349.58	1,188.96	....
741.37	1,312.88	904.93	297.29	4,833.26	4,692.35	....	140.91
2,865.19	2,153.71	1,614.42	487.67	12,722.92	14,858.30	2,135.38	....
159.23	65.71	42.92	14.88	401.32	434.71	33.39	....
5,247.52	4,837.34	3,623.91	1,095.35	23,965.54	23,395.30	....	570.24
2,108.91	986.60	742.55	223.40	6.119.03	6,059.60	....	59.43
....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....
123,598.54	86,798.71	64,032.92	19,654.31	492,568.29	514,902.54	31,712.17	9,377.92

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

EASTERN ONTARIO

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating		Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
			Credit	Charge	Credited	Charged
			$ c.	$ c.	$ c.	$ c.
Alexandria	Jan.	1921	1,622.86			1,622.86
Apple Hill	April	1921	255.71			255.71
Athens	Jan.	1929	691.18			691.18
Bath	Nov.	1931	286.34			286.34
Belleville	April	1929	20,395.44			20,395.44
Bloomfield	April	1919	528.84			528.84
Bowmanville	Oct.	1931	10,910.92			10,910.92
Brighton	Nov.	1929	1,110.87			1,110.87
Brockville	April	1915	11,368.97			11,368.97
Cardinal	July	1930	1,057.70			1,057.70
Carleton Place	May	1919	3,946.88			3,946.88
Chesterville	April	1914	1,520.97			1,520.97
Cobden	Nov.	1935				
Cobourg	Jan.	1932	8,121.93			8,121.93
Colborne	Jan.	1933	607.74			607.74
Deseronto	Jan.	1931	294.18			294.18
Finch	Feb.	1928	567.25			567.25
Hastings	June	1931	545.23			545.23
Havelock	Feb.	1921	474.56			474.56
Kemptville	Dec.	1921	1,665.21			1,665.21
Lakefield	Aug.	1920	811.56			811.56
Lanark	Sept.	1921	535.58			535.58
Lancaster	May	1921	3,064.17			3,064.17
Lindsay	Mar.	1928	12,622.86			12,622.86
Madoc	Jan.	1930	864.84			864.84
Marmora	Jan.	1921	914.97			914.97
Martintown	May	1921	154.17			154.17
Maxville	Feb.	1921	668.76			668.76
Napanee	Nov.	1929	4,905.94			4,905.94
Norwood	Feb.	1921	409.94			409.94
Oshawa	Feb.	1929	40,979.70			40,979.70
Ottawa	Jan.	1914	28,392.44			28,392.44
Perth	Feb.	1919	5,480.61			5,480.61
Peterborough	Mar.	1913	29,249.84			29,249.84
Picton	April	1919	5,365.71			5,365.71
Port Hope	Nov.	1929	6,932.29			6,932.29
Prescott	Dec.	1913	3,962.41			3,962.41
Richmond	Aug.	1928		50.69	50.69	
Russell	Feb.	1926	670.99			670.99
Smiths Falls	Sept.	1918	6,215.08			6,215.08
Stirling	Jan.	1930	1,341.80			1,341.80
Trenton	Sept.	1931	14,131.65			14,131.65
Tweed	Dec.	1930	1,109.62			1,109.62
Warkworth	Oct.	1923	513.25			513.25
Wellington	April	1919	1,035.88			1,035.88
Westport	Nov.	1931	588.09			588.09
Whitby	Jan.	1926	6,071.42			6,071.42

SYSTEM *E.O.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
28.88		710.65		739.53	
4.53		226.46		230.99	
10.32		521.59		531.91	
4.79		90.72		95.51	
362.36		14,310.73		14,673.09	
9.43		309.30		318.73	
194.39		6,184.43		6,378.82	
19.70		1,200.68		1,220.38	
201.89		8,094.46		8,296.35	
19.21		880.94		900.15	
63.57		5,229.20		5,292.77	
27.77		1,063.67		1,091.44	
		269.07		269.07	
145.31		3,908.75		4,054.06	
9.63		476.05		485.68	
4.89		942.19		947.08	
10.15		557.46		567.61	
9.66		295.19		304.85	
7.47		453.29		460.76	
29.56		1,162.00		1,191.56	
12.59		1,307.05		1,319.64	
9.53		189.06		198.59	
62.21		458.46		520.67	
228.27		5,150.17		5,378.44	
15.35		185.11		200.46	
17.15		126.26		143.41	
2.72		69.41		72.13	
11.36		497.28		508.64	
87.63		4,342.21		4,429.84	
7.15		303.57		310.72	
680.76		35,129.67		35,810.43	
468.55		17,623.60		18,092.15	
97.53		2,646.19		2,743.72	
518.06		22,709.28		23,227.34	
95.50		3,149.08		3,244.58	
123.14		3,804.04		3,927.18	
83.61		2,586.88		2,670.49	
	0.83	122.74		121.91	
14.14		636.46		650.60	
109.91		4,232.88		4,342.79	
24.75		248.92		273.67	
240.29		7,776.60		8,016.89	
19.66		599.00		618.66	
9.16		277.36		286.52	
17.98		629.04		647.02	
10.10		758.52		768.62	
110.99		2,769.53		2,880.52	

EASTERN ONTARIO

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year. Also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Williamsburg	April 1915	1,454.64			1,454.64
Winchester	Jan. 1914	1,674.12			1,674.12
Total—Municipalities		246,095.11	50.69	50.69	246,095.11
RURAL POWER DISTRICTS					
Alexandria R.P.D.	Dec. 1929		4,623.07	40.00	
Arnprior R.P.D.	Dec. 1930		1,866.28		90.00
Belleville R.P.D.	Aug. 1927	31,714.24			105.00
Bowmanville R.P.D.	Jan. 1924	1,683.54			15.00
Brighton R.P.D.	Nov. 1929	492.45			
Brockville R.P.D.	Nov. 1921	2,943.68		250.00	
Campbellford R.P.D.	Aug. 1924		1,892.34		30.00
Carleton Place R.P.D.	Feb. 1932		89.30		
Chesterville R.P.D.	Nov. 1921		3,146.37		330.00
Cobourg R.P.D.	Feb. 1927		407.68	105.00	
Colborne R.P.D.	Aug. 1925		2,922.68		55.00
Fenelon Falls R.P.D.	July 1931		2,075.27	35.00	25.00
Iroquois R.P.D.	July 1930	5,581.07			80.00
Kemptville R.P.D.	Dec. 1930		5.94		
Kingston R.P.D.	Jan. 1923		7,524.34		75.00
Lakefield R.P.D.	July 1928		2,873.01	30.00	
Marmora R.P.D.	July 1936				
Martintown R.P.D.	Jan. 1922	2,511.23			75.00
Maxville R.P.D.	Dec. 1927		2,576.45		180.00
Millbrook R.P.D.	July 1930		1,694.77		
Napanee R.P.D.	Nov. 1927		7,810.07		55.00
Nepean R.P.D.	Feb. 1922	4,080.83			671.20
Newcastle R.P.D.	Sept. 1927	2,069.73			25.00
Norwood R.P.D.	Jan. 1929		2,561.09		65.00
Omemee R.P.D.	Jan. 1931		764.43	20.00	
Oshawa R.P.D.	April 1918	45,941.60		300.00	1,402.42
Perth R.P.D.	Aug. 1931		5,470.47	70.00	
Peterborough R.P.D.	Jan. 1927	16,116.51		235.00	
Prescott R.P.D.	June 1922		965.41	175.00	
Renfrew R.P.D.	Nov. 1930		2,054.93	80.00	
Smiths Falls R.P.D.	May 1929		1,878.37	45.00	
Stirling R.P.D.	Nov. 1929		761.79	35.00	
Trenton R.P.D.	Jan. 1924	4,686.22		30.94	160.00
Warkworth R.P.D.	Nov. 1928	0.38			
Wellington R.P.D.	Nov. 1925		3,880.70	25.00	145.97
Williamsburg R.P.D.	Feb. 1923		206.97	85.00	
Totals—Rural power districts		117,821.48	58,051.73	1,560.94	3,584.59
Totals—Municipalities		246,095.11	50.69	50.69	246,095.11
Grand totals		363,916.59	58,102.42	1,611.63	249,679.70

Note—For townships included in rural power districts see "Cost of Power" statement preceding.

SYSTEM *E.O.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
29.16		753.52		782.68	
30.00		1,189.79		1,219.79	
4,300.76	0.83	167,158.51		171,458.44	
	183.32		597.23		5,363.62
	78.25	771.74			1,262.79
1,264.37		3,631.76		36,505.37	
66.74		1,496.45		3,231.73	
19.70		300.67		812.82	
127.75		2,289.68		5,611.11	
	76.89		697.81		2,697.04
	3.57		18.96		111.83
	139.05	75.16			3,540.26
	12.11		460.64		775.43
	119.11		1,115.43		4,212.22
	82.61		222.86		2,370.74
220.04		4,177.05		9,898.16	
	0.24	262.11		255.93	
	303.97	270.67			7,632.64
	113.72		502.80		3,459.53
			103.67		103.67
97.45		899.74		3,433.42	
	110.26		1,146.21		4,012.92
	67.79	257.26			1,505.30
	314.60		432.22		8,611.89
139.17		5,233.26		8,782.06	
81.79		1,007.81		3,134.33	
	105.04		415.66		3,146.79
	29.78		157 91		932.12
1,802.92		4,556.72		51,198.82	
	216.02		1,324.87		6,941.36
654.06		3,124.36		20,129 93	
	31.62		152.68		974.71
	79.00		1,258.39		3,312.32
	73.33	1,188.96			717.74
	29.07		140.91		896.77
182.18		2,135.38		6,874.72	
0.02		33.39		33.79	
	155.20		570.24		4,727.11
	4.88		59.43		186.28
4,656.19	2,329.43	31,712.17	9,377.92	149,902.19	67,495.08
4,300.76	0.83	167,158.51		171,458.44	
8,956.95	2,330.26	198,870.68	9,377.92	321,360.63	67,495.08

EASTERN ONTARIO SYSTEM *E.O.—SINKING FUND*

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder as part of the cost of power delivered thereto, together with its proportionate share of other sinking funds provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Municipality	Period of years ending Oct. 31, 1936	Amount
		$ c.
Alexandria	12 years	22,921.75
Apple Hill	12 “	2,334.83
Athens	8 “	3,878.02
Bath	5 “	1,142.63
Belleville	8 “	103,439.14
Bloomfield	8 “	3,929.41
Bowmanville	5 “	29,851.04
Brighton	7 “	6,834.62
Brockville	16 “	121,243.08
Cardinal	7 “	2,865.12
Carleton Place	12 “	55,152.56
Chesterville	17 “	21,057.91
Cobden	1 “	138.85
Cobourg	5 “	22,327.76
Colborne	4 “	1,663.01
Deseronto	6 “	3,975.65
Finch	9 “	2,777.41
Hastings	6 “	1,961.00
Havelock	8 “	8,281.25
Kemptville	12 “	14,175.21
Lakefield	8 “	7,960.37
Lanark	12 “	4,352.54
Lancaster	12 “	4,551.23
Lindsay	8 “	57,816.29
Madoc	7 “	4,481.84
Marmora	8 “	3,487.74
Martintown	12 “	1,461.63
Maxville	12 “	6,881.25
Napanee	7 “	25,302.36
Norwood	8 “	4,026.51
Oshawa	8 “	316,187.34
Ottawa	21 “	101,022.15
Perth	12 “	48,123.32
Peterborough	8 “	189,039.95
Picton	8 “	33,423.96
Port Hope	7 “	31,994.72
Prescott	17 “	34,489.40
Richmond	9 “	1,686.00
Russell	11 “	3,958.02
Smiths Falls	13 “	71,051.99
Stirling	7 “	5,345.24
Trenton	5 “	39,770.21
Tweed	6 “	5,133.64
Warkworth	8 “	2,443.50
Wellington	8 “	6,410.42
Westport	5 “	2,437.80
Whitby	8 “	32,290.41
		$ c.
Williamsburg	16 years	4,191.66
Winchester	17 “	14,372.01
Total—Municipalities		1,493,643.75
RURAL POWER DISTRICTS		
Alexandria R.P.D.	7 years	2,241.12
Arnprior R.P.D.	6 “	510.74
Belleville R.P.D.	8 “	13,784.38
Bowmanville R.P.D.	8 “	4,079.63
Brighton R.P.D.	7 “	1,070.42
Brockville R.P.D.	15 “	18,279.18
Campbellford R.P.D.	8 “	3,369.47
Carleton Place R.P.D.	5 “	24.16
Chesterville R.P.D.	15 “	11,703.32
Cobourg R.P.D.	8 “	14,797.11
Colborne	8 “	4,781.35
Fenelon Falls R.P.D.	6 “	4,060.85
Iroquois R.P.D.	7 “	12,785.93
Kemptville R.P.D.	6 “	837.51
Kingston R.P.D.	8 “	16,979.02
Lakefield R.P.D.	8 “	2,120.93
Marmora R.P.D.	1 “	10.74
Martintown R.P.D.	15 “	6,158.63
Maxville R.P.D.	9 “	10,512.52
Millbrook R.P.D.	7 “	2,159.74
Napanee R.P.D.	8 “	12,046.74
Nepean R.P.D.	15 “	24,803.84
Newcastle R.P.D.	8 “	3,448.83
Norwood R.P.D.	8 “	1,578.28
Omemee R.P.D.	6 “	271.70
Oshawa R.P.D.	8 “	31,833.13
Perth R.P.D.	6 “	1,451.95
Peterborough R.P.D.	8 “	21,720.01
Prescott R.P.D.	15 “	9,037.30
Renfrew R.P.D.	6 “	632.46
Smiths Falls R.P.D.	8 “	9,044.99
Stirling R.P.D.	7 “	2,900.13
Trenton R.P.D.	8 “	5,772.42
Warkworth R.P.D.	8 “	170.09
Wellington R.P.D.	8 “	11,390.18
Williamsburg R.P.D.	12 “	2,198.68
Total—Rural power districts		268,567.48
Total—Municipalities		1,493,643.75
Grand total		$1,762,211.23

Note—For townships included in rural power districts see “Cost of Power” statement preceding.

THUNDER BAY

Statement showing the amount to be paid by each Municipality as the Cost—under received by the Commission from each Municipality on account of such cost; upon ascertainment (by annual adjustment) of the actual cost

Municipality	Interim rates per horsepower collected by Commission during year		Share of capital cost of system on which interest and fixed charges are payable	Average horsepower supplied in year after correction for power factor	Operation, maintenance and administrative expenses	Interest
	To Oct. 31 1935	To Oct. 31 1936				
			$ c.		$ c.	$ c.
Fort William	$21.00 plus transformation charges		2,993,944.81	10,340.1	38,342.53	143,878.86
Port Arthur	$21.00 plus transformation charges		9,618,955.00	33,850.5	118,840.26	462,224.17
Township of Nipigon	$30.00	$30.00	25,535.28	97.0	1,064.66	1,226.50
RURAL POWER DISTRICTS						
Fort William R.P.D.—Neebing, Oliver and Paipoonge twps			35,841.64	114.5	724.26	1,722.82
Port Arthur R.P.D.—Shuniah twp			18,419.10	54.9	445.60	885.59
Totals—Municipalities			12,638,435.09	44,287.6	158,247.45	607,329.53
Totals—Rural power districts			54,260.74	169.4	1,169.86	2,608.41
Totals—Companies			5,929,984.55	21,566.1	79,139.85	284,684.34
			18,622,680.38			
Non-operating capital			135,278.91			
Grand totals			18,757,959.29	66,023.1	238,557.16	894,622.28

THUNDER BAY SYSTEM—

Statement showing the costs of distribution of power within each Rural Power and the amounts remaining to be credited to certain Districts or charged to (by annual adjustment) of the actual costs

Rural power district	Total capital cost of each district, Provincial Government grant received and applied thereagainst, and the balance representing the investment by the Commission			Cost of power delivered to districts as shown in "cost of power" table preceding	
	Total capital cost	Government grant	Commission's investment		Cost of operation, maintenance and administration
	$ c.	$ c.	$ c.	$ c.	$ c.
Fort William R.P.D.—Neebing, Oliver and Paipoonge twps	72,688.41	36,344.20	36,344.21	3,023.41	2,489.54
Port Arthur R.P.D.—Shuniah twp	51,746.20	25,873.10	25,873.10	1,645.22	1,597.81
Total—Capital	124,434.61	62,217.30	62,217.31		
Non-operating capital	349.27	174.64	174.63		
Grand totals	124,783.88	62,391.94	62,391.94	4,668.63	4,087.35

SYSTEM *T.B.—COST OF POWER*

the Power Commission Act—of Power supplied to it by the Commission; the amount and the amount remaining to be credited or charged to each Municipality of power supplied to it in the year ending October 31, 1936

Provision for depreciation and obsolescence	Provision for contingencies	Sinking fund	Total	Revenue received in excess cost of power sold to private companies	Total cost of power for year as provided to be paid under Power Commission Act	Amounts received from (or billed against) each municipality by the Commission	Amounts remaining to be credited to each municipality upon ascertainment of the actual cost of power by annual adjustment
							Credited
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
26,289.92	13,943.92	22,403.03	244,858.26	17,998.47	226,859.79	233,151.90	6,292.11
83,330.51	44,736.67	71,421.01	780,552.62	58,921.79	721,630.83	746,072.46	24,441.63
211.47	119.08	183.25	2,804.96	168.84	2,636.12	2,911.30	275.18
331.43	167.84	276.36	3,222.71	199.30	3,023.41	3,023.41	see below
177.43	86.65	145.51	1,740.78	95.56	1,645.22	1,645.22	"
109,831.90	58,799.67	94,007.29	1,028,215.84	(77,089.10)	951,126.74	982,135.66	31,008.92
508.86	254.49	421.87	4,963.49	(294.86)	4,668.63	4,668.63	....
47,993.16	26,802.78	53,740.82	492,360.95	77,383.96	569,744.91	569,744.91	....
158,333.92	85,856.94	148,169.98	1,525,540.28	....	1,525,540.28	1,556,549.20	31,008.92

RURAL POWER DISTRICTS *T.B.—RURAL OPERATING*

District, the revenues collected from (or charged to) customers within each District; the Municipalities comprising certain other Districts upon ascertainment in the year ending October 31, 1936

Distribution costs and fixed charges			Total cost	Revenue from power and light customers in each district	Amounts remaining to be credited to certain districts or charged to the municipalities comprising certain other districts	
Interest	Provision for depreciation and obsolescence	Sinking fund			Credited	Charged
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,714.28	622.05	374.30	8,223.58	9,382.73	1,159.15	....
1,226.43	445.03	267.78	5,182.27	4,543.51	....	638.76
2,940.71	1,067.08	642.08	13,405.85	13,926.24	1,159.15	638.76

THUNDER BAY

Statement showing the net Credit or Charge to each Municipality in respect of power made and interest added during the year; also the net amount Credited ending October 31, 1936, and the accumulated amount standing

Municipality	Date commenced operating	Net credit or charge at October 31, 1935		Cash receipts and payments on account of such credits and charges, also adjustments made during the year	
		Credit	Charge	Credited	Charged
		$ c.	$ c.	$ c.	$ c.
Fort William	Oct. 1926		446.00	446.00	
Nipigon twp	Jan. 1925	338.72			338.72
Port Arthur	Dec. 1910	2,577.48			2,577.48
RURAL POWER DISTRICTS					
Fort William R.P.D.—Neebing, Oliver and Paipoonge twps	Oct. 1932	462.89			500.00
Port Arthur R.P.D.—Shuniah twp	Jan. 1932		4,583.24		160.00
Totals		3,379.09	5,029.24	446.00	3,576.20

THUNDER BAY SYSTEM *T.B.—SINKING FUND*

Statement showing Sinking Fund paid by each Municipality in the periods mentioned hereunder, as part of the cost of power delivered thereto, together with the proportionate share of other sinking funds provided out of other revenues of the system, and interest allowed thereon to October 31, 1936

Municipality	Period of years ending October 31, 1936	Amount
		$ c.
Fort William	10 years	379,377.22
Nipigon twp	10 "	2,536.28
Port Arthur	10 "	1,270,558.91
Total—Municipalities		1,652,472.41
RURAL POWER DISTRICTS		
Fort William R.P.D.—Neebing, Oliver and Paipoonge twps	5 years	2,929.74
Port Arthur R.P.D.	5 "	1,774.71
Total—Rural power districts		4,704.45
Total—Municipalities		1,652,472.41
Total—Rural power districts		4,704.45
Grand total		1,657,176.86

SYSTEM *T.B.—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the cash receipts and payments thereon, adjustments or Charged to each Municipality in respect of power supplied in the year as a Credit or Charge to each Municipality at October 31, 1936

Interest at 4% per annum added during the year		Net amount credited or charged in respect of power supplied in the year ending October 31, 1936		Accumulated amount standing as a credit or charge on October 31, 1936	
Credited	Charged	Credited	Charged	Credit	Charge
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	8.38	6,292.11		6,283.73	
4.75		275.18		279.93	
47.61		24,441.63		24,489.24	
	1.48	1,159.15		1.120.56	
	189.73		638.76		5,571.73
52.36	199.59	32,168.07	638.76	32,173.46	5,571.73

MANITOULIN ISLAND

Statement showing the costs of distribution of power within the Rural Power District; amount remaining to be credited to this District upon ascertainment (by

Rural power district	Total capital cost of each district, Provincial Government grant received and applied thereagainst, and the balance representing the investment by the Commission			
	Total capital cost	Government grant	Commission's investment	Cost of power purchased
	$ c.	$ c.	$ c.	$ c.
Manitoulin R.P.D.—Billings, Carnarvon, and Gordon and Allan twps., Town of Gore Bay and Indian Reserve	65,583.07	29,860.88	35,722.19	3,750.00

MANITOULIN ISLAND

Statement showing the net charge to Manitoulin Rural Power District in respect net amount credited this Rural Power District in respect of power amount standing as a charge

Rural power district	Date commenced operating	Net charge at October 31, 1935	Adjustments made during the year
		Charge	Charged
		$ c.	$ c.
Manitoulin R.P.D.—Billings, Carnarvon, and Gordon and Allan twps., Town of Gore Bay and Indian Reserve	Dec. 1932	3,607.15	30.00

RURAL POWER DISTRICT *MANITOULIN—RURAL OPERATING*

the revenue collected from (or charged to) customers within the District and the annual adjustment) of the actual costs in the year ending October 31, 1936

Distribution costs and fixed charges					Revenue from power and light customers in each district	Amount remaining to be credited to the district
Cost of operation maintenance and administration	Interest	Depreciation and obsolescence	Sinking fund	Total cost		Credited
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1,216.99	1,523.98	1,147.70	376.15	8,014.82	8,864.56	849.74

RURAL POWER DISTRICT *MANITOULIN—CREDIT OR CHARGE*

of power supplied to it to October 31, 1935, interest added during the year; also the supplied in the year ending October 31, 1936, and the accumulated at October 31, 1936.

Interest at 4% per annum added during the year	Net amount credited in respect of power supplied in the year ending October 31, 1936	Accumulated amount standing as a charge on October 31, 1936
Charged	Credited	Charge
$ c.	$ c.	$ c.
145.49	849.74	2,932.90

NIPISSING RURAL

Statement showing the costs of distribution of power within each Rural Power and the amounts remaining to be credited to certain of the actual costs in the

Rural power district	Total capital cost of each district, Provincial Government grant received and applied thereagainst, and the balance representing the investment by the Commission			Cost of power purchased from Nipissing District of Northern Ontario Properties
	Total capital cost	Government grant	Commission's investment	
	$ c.	$ c.	$ c.	$ c.
North Bay R.P.D.—West Ferris and Widdifield twps.	53,194.61	26,225.44	26,969.17	5,398.64
Powassan R.P.D.—Himsworth S. twp.	6,551.90	3,275.95	3,275.95	183.34
Total capital	59,746.51	29,501.39	30,245.12	5,581.98
Non-operating capital	588.15	294.07	294.08	....
Grand totals	60,334.66	29,795.46	30,539.20	5,581.98

NIPISSING RURAL

Statement showing the net Credit to each Rural Power District in respect of power amount credited to each Rural Power District in respect of accumulated amount standing as a credit to

Rural power district	Date commenced operating	Net credit at October 31, 1935
		Credit
		$ c.
North Bay R.P.D.—West Ferris and Widdifield twps.	June, 1927	10,993.54
Powassan R.P.D.—Himsworth S. twp.	Nov., 1931	337.34
Totals	....	11,330.88

POWER DISTRICTS *NIPISSING RURAL—OPERATING*

District, the revenues collected from (or charged to) customers within each District, Districts upon ascertainment (by annual adjustment) year ending October 31, 1936

Cost of operation maintenance and administration	Interest	Provision for depreciation and obsolescence	Provision for sinking fund	Total cost	Revenue from power and light customers in each district	Amounts remaining to be credited to certain districts
						Credited
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
3,088.08	1,209.96	874.81	267.11	10,838.60	11,193.30	354.70
138.55	150.05	110.10	33.12	615.16	764.27	149.11
3,226.63	1,360.01	984.91	300.23	11,453.76	11,957.57	503.81
....	....	....	....	....	....	....
3,226.63	1,360.01	984.91	300.23	11,453.76	11,957.57	503.81

POWER DISTRICTS *NIPISSING RURAL—CREDIT OR CHARGE*

supplied to it to October 31, 1935, the interest added during the year; also the net power supplied in the year ending October 31, 1936, and the each Rural Power District at October 31, 1936

Interest at 4% per annum added during the year	Net amount credited in respect of power supplied in the year ending October 31, 1936	Accumulated amount standing as a credit on October 31, 1936
Credited	Credited	Credit
$ c.	$ c.	$ c.
439.74	354.70	11,787.98
13.49	149.11	499.94
453.23	503.81	12,287.92

NIPISSING RURAL POWER DISTRICTS *SINKING FUND*

Statement showing Sinking Fund paid by each Rural Power District in the periods mentioned hereunder, as part of the cost of power delivered thereto and interest allowed thereon to October 31, 1936

Rural power district	Period of years ending October 31, 1936	Amount
		$ c.
North Bay R.P.D.—West Ferris and Widdifield twps.	7 years	1,427.99
Powassan R.P.D.—Himsworth S. twp.	5 "	146.44
Total		1,574.43

NORTHERN ONTARIO PROPERTIES

(Operated by The Hydro-Electric Power Commission of Ontario)

FINANCIAL ACCOUNTS

For the Year ended October 31, 1936

Relating to Power Properties which are held and operated by the Commission in trust for the Province of Ontario, and which are situated in the following Northern Districts:

Nipissing	Abitibi	Patricia
Sudbury	Espanola	St. Joseph

STATEMENTS

Balance Sheet as at October 31, 1936

Operating and Income Accounts for the Year ended October 31, 1936

Schedules supporting the Balance Sheet as at October 31, 1936

- Fixed Assets—By Districts
- Depreciation and Obsolescence Reserves
- Contingency Reserves
- Sinking Fund Reserves

NORTHERN ONTARIO

(Operated by The Hydro-Electric

Balance Sheet as at

ASSETS

INVESTMENTS:			
Fixed Assets in Service:			
Nipissing District	$1,674,141.70		
Sudbury District	2,787,179.51		
Abitibi District	26,176,455.77		
Espanola District	12,900.81		
Patricia District	506,880.79		
St. Joseph District	682,238.08		
		$31,839,796.66	
Fixed Assets under Construction		313,892.46	
			$32,153,689.12
CURRENT AND ACCRUED ASSETS:			
Special deposits for matured interest unpaid		$ 21,949.39	
Sundry accounts receivable		63,243.95	
Power accounts receivable		243,563.10	
Province of Ontario—Deficit contributions		435,146.19	
Consumers' and contractors' deposits:			
Securities—Bonds at par value	$ 424,700.00		
Securities—Stocks at market value	187,187.50		
		611,887.50	
			1,375,790.13
DEFERRED DEBITS:			
Maintenance materials and supplies		$ 46,314.76	
Construction tools and equipment		45,439.48	
Prepayments		46,809.54	
Unamortized debt discount		19,023.33	
			157,587.11
SPECIAL FUNDS:			
Contingency reserve funds:			
*Amount receivable from current assets—per contra			94,979.54
			$33,782,045.90

Approved by:—

A. MURRAY MCCRIMMON - - Secretary and Controller
T. S. LYON - - - - Chairman of the Commission
A. W. ROEBUCK - - - - - - - Commissioner
T. B. MCQUESTEN - - - - - - - Commissioner

PROPERTIES

Power Commission of Ontario)

October 31, 1936

LIABILITIES, RESERVES AND EQUITY

Long-Term Liabilities:			
Funded debt in the hands of the public		$22,626,950.00	
Purchase Agreement—Falconbridge transformer station		46,033.70	
			$22,672,983.70
Current and Accrued Liabilities:			
Accounts payable		$ 100,191.81	
Matured debenture interest unpaid		21,949.39	
Debenture interest accrued		72,245.27	
Miscellaneous Accrued Liabilities		5.54	
Hydro-Electric Power Commission of Ontario		873,403.41	
Liability for consumers' and contractors' deposits		644,474.12	
		$ 1,712,269.54	
*Liability to special funds—per contra		94,979.54	
			1,807,249.08
Deferred Credits:			
Miscellaneous deferred credits			2,845.50
Reserves:			
Depreciation reserves:			
Additions to property through depreciation reserves		$ 1,103,591.13	
Contingency reserves:			
Additions to property through contingency reserves	$ 206,222.56		
Contingency reserve funds	94,979.54		
		301,202.10	
			1,404,793.23
Equity of the Province of Ontario:			
Advances from the Province of Ontario for:			
Capital expenditures	$ 7,168,053.63		
Operating deficits and sinking fund appropriations	888,802.80		
		$ 8,056,856.43	
Deficit account:			
Balance at November 1, 1935	$ 841,711.18		
Net income for the year ended October 31, 1936	343,764.31		
	$ 497,946.87		
Sinking fund appropriations for the year ended October 31, 1936	390,855.93		
Balance at October 31, 1936		888,802.80	
		$ 7,168,053.63	
Sinking fund reserves:			
Provincial advances repaid through sinking funds		726,120.76	
			7,894,174.39
			$33,782,045.90

Auditors' Certificate

We have examined the Books and Accounts of the Northern Ontario Properties for the year ended the 31st October, 1936, and report that, in conjunction with our Annual Report to the Lieutenant-Governor in Council, in our opinion the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of Northern Ontario Properties at the 31st October, 1936, according to the best of our information and the explanations given to us and as shown by the books of the Properties. We have obtained all the information and explanations we have required.

Oscar Hudson and Co.,
Chartered Accountants,
Auditors

Dated at Toronto, Ontario,
12th April, 1937.

NORTHERN ONTARIO

(Operated by The Hydro-Electric

Operating and Income Accounts for the

	Nipissing District	Sudbury District	Abitibi District
OPERATING REVENUES:	$ c.	$ c.	$ c.
Power sold to private companies and customers	241,565.83	390,060.33	1,411,107.22
Power supplied to rural power districts	5,658.87	....	....
Total operating revenues	247,224.70	390,060.33	1,411,107.22
OPERATING EXPENSES:			
Power purchased	....	9,504.09	689.30
Operation, maintenance and administration expenses	91,155.91	82,121.78	264,178.48
Depreciation provision for the year:			
Principal amount	17,751.77	27,709.72	188,750.34
Interest on reserves' balances	11,701.32	5,810.96	15,099.24
Total provision	29,453.09	33,520.68	203,849.58
Contingency provision for the year:			
Principal amount	8,597.49	18,473.14	....
Interest on reserves' balances	6,150.01	4,905.51	....
Total provision	14,747.50	23,378.65	....
Total operating expenses	135,356.50	148,525.20	468,717.36
NET OPERATING INCOME	111,868.20	241,535.13	942,389.86
NON-OPERATING INCOME:			
Income from depreciation fund investments	19,756.80	11,666.82	957.51
Interest during construction	.84	987.18	7,691.41
Commission's interest adjustment	11,846.00	3,618.15	*39,972.85*
Total non-operating income	31,603.64	16,272.15	*31,323.93*
GROSS INCOME	143,471.84	257,807.28	911,065.93
DEDUCTIONS FROM GROSS INCOME:			
Interest on long-term debt:			
H-E.P.C. debentures	....	....	691,943.25
Ontario Government bonds	77,679.32	127,055.82	117,209.47
Exchange and commissions:			
H-E.P.C. debentures	....	....	696.95
Ontario Government bonds	922.22	1,508.42	1,391.52
Amortization of debt discount	....	....	2,634.00
Miscellaneous interest deductions	430.81	0.66	40,624.32
Total deductions from gross income	79,032.35	128,564.90	854,499.51
NET INCOME (or *Loss*)	64,439.49	129,242.38	56,566.42
DISPOSITION OF NET INCOME:			
Sinking fund appropriation:			
Principal amount	17,627.38	28,822.17	269,780.82
Interest on reserves' balances	705.35	1,148.93	9,743.63
Total appropriation	18,332.73	29,971.10	279,524.45
SURPLUS (or *Deficit*) AFTER SINKING FUND APPROPRIATION	46,106.76	99,271.28	*222,958.03*

PROPERTIES

Power Commission of Ontario)

Years Ended October 31, 1935 and 1936

Espanola District	Patricia District	St. Joseph District	Total for Northern Ontario Properties		
			1935-36	1934-35	*Decrease* or Increase
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
4,160.16	100,827.50	88,858.73	2,236,579.77	1,679,356.01	557,223.76
....	....	....	5,658.87	5,020.05	638.82
4,160.16	100,827.50	88,858.73	2,242,238.64	1,684,376.06	557,862.58
5,732.00	....	....	15,925.39	12,089.83	3,835.56
1,114.55	35,615.29	22,637.46	496,823.47	419,546.01	77,277.46
193.51	....	....	234,405.34	215,896.87	18,508.47
19.15	1,542.23	....	34,172.90	24,607.45	9,565.45
212.66	1,542.23	....	268,578.24	240,504.32	28,073.92
129.01	....	....	27,199.64	27,199.50	0.14
9.99	375.85	....	11,441.36	10,136.89	1,304.47
139.00	375.85	....	38,641.00	37,336.39	1,304.61
7,198.21	37,533.37	22,637.46	819,968.10	709,476.55	110,491.55
3,038.05	63,294.13	66,221.27	1,422,270.54	974,899.51	447,371.03
....	2,768.44	....	35,149.57	29,317.43	5,832.14
....	493.13	4,238.59	13,411.15	5,196.74	8,214.41
122.72	*40.35*	*1,121.41*	*25,793.18*	*71,770.96*	45,977.78
122.72	3,221.22	3,117.18	22,767.54	*37,256.79*	60,024.33
3,160.77	66,515.35	69,338.45	1,445,038.08	937,642.72	507,395.36
....	....	8,333.33	700,276.58	617,647.53	82,629.05
50.39	23,964.92	3,718.20	349,678.12	369,888.41	*20,210.29*
....	....	77.44	774.39	762.95	11.44
0.60	284.51	44.14	4,151.41	1.143.18	3,008.23
....	....	292.67	2,926.67	....	2,926.67
90.80	....	2,320.01	43,466.60	990.39	42,476.21
141.79	24,249.43	14,785.79	1,101,273.77	990,432.46	110,841.31
3,302.56	42,265.92	54,552.66	343,764.31	*52,789.74*	396,554.05
135.85	25,657.65	35,646.74	377,670.61	335,264.83	42,405.78
10.52	888.21	688.68	13,185.32	....	13,185.32
146.37	26,545.86	36,335.42	390,855.93	335,264.83	55,591.10
3,448.93	15,720.06	18,217.24	*47,091.62*	*388,054.57*	340,962.95

NORTHERN ONTARIO PROPERTIES

(Operated by The Hydro-Electric Power Commission of Ontario)

Fixed Assets at October 31, 1936

DISTRICT	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
NIPISSING:						
Power Plants:						
South River:						
Nipissing	311.32			11,099.60	239,043.29	250,142.89
Bingham's Chute	492.16			12,098.60	227,835.04	239,933.64
Elliot Chute	*700.00*			119,357.09	335,124.99	454,482.08
Storage Dams	*7,348.51*				74,522.70	74,522.70
Miscellaneous					6,390.46	6,390.46
Intangible			69,478.34			69,478.34
	7,245.03		69,478.34	142,555.29	882,916.48	1,094,950.11
Transformer Stations	129.13				16,932.22	16,932.22
Transmission Lines	*561.47*				172,963.28	172,963.28
Local Systems	6,870.43		22,649.50		366,646.59	389,296.09
	806.94		92,127.84	142,555.29	1,439,458.57	1,674,141.70
SUDBURY:						
Power Plants:						
Wahnapitae River:						
Coniston	6,200.79	5,784.25		13,200.00	508,224.06	521,424.06
McVittie	110,308.54	111,647.45		13,200.00	290,122.75	303,322.75
Stinson	6,160.84	6,160.84		33,000.00	624,381.66	657,381.66
Storage Dam					194,870.00	194,870.00
Intangible			830,614.53			830,614.53
	122,670.17	123,592.54	830,614.53	59,400.00	1,617,598.47	2,507,613.00
Transformer Stations	35,537.50				82,970.61	82,970.61
Transmission Lines	19,939.50	82.36			196,595.90	196,595.90
	178,147.17	123,674.90	830,614.53	59,400.00	1,897,164.98	2,787,179.51
ABITIBI:						
Power Plants:						
Abitibi River:						
Abitibi Canyon	*2,144,771.95*			5,472,496.27	14,178,300.07	19,650,796.34
Transformer Stations	268,357.35	39,149.32			904,983.37	904,983.37
Transmission Lines	*2,709,327.61	45,407.36		608,839.34	4,976,993.96	5,585,833.30
Local Systems	23,266.54	977.43			34,842.76	34,842.76
	856,179.55	85,534.11		6,081,335.61	20,095,120.16	26,176,455.77

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*Includes $2,332,113.42 transferred from Abitibi Canyon Development for lines acquired in the purchase of properties of Ontario Power Service Corporation, Ltd.

NORTHERN ONTARIO PROPERTIES

(Operated by The Hydro-Electric Power Commission of Ontario)

Fixed Assets at October 31, 1936

DISTRICT	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
ESPANOLA:						
Transformer Stations					2,382.77	2,382.77
Transmission Lines	**9,911.59*				10,518.04	10,518.04
	9,911.59				12,900.81	12,900.81
PATRICIA:						
Power Plants:						
English River:						
Ear Falls	114,045.92	99,431.91			503,275.12	503,275.12
Transformer Stations	1,588.24	1,035.46			3,605.67	3,605.67
	115,634.16	100,467.37			506,880.79	506,880.79
ST. JOSEPH:						
Power Plants:						
Albany River:						
Rat Rapids	269,185.21				647,436.59	647,436.59
Donations in aid of construction					*80,000.00*	*80,000.00*
	269,185.21				567,436.59	567,436.59
Transformer Stations	1,280.29	739.01			2,915.35	2,915.35
Transmission Lines	4,276.57	3,477.07			111,886.14	111,886.14
	274,742.07	4,216.08			682,238.08	682,238.08

*Includes $9,987.24 reduction in purchase cost of transmission line.

SUMMARY

DISTRICT	Net capital expenditures for the year	Fixed Assets under Construction	Fixed Assets in Service			
			Water rights and intangible items	Physical property		Total
				Non-depreciable	Depreciable	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Nipissing District	*806.94*		92,127.84	142,555.29	1,439,458.57	1,674,141.70
Sudbury District	178,147.17	123,674.90	830,614.53	59,400.00	1,897,164.98	2,787,179.51
Abitibi District	856,179.55	85,534.11		6,081,335.61	20,095,120.16	26,176,455.77
Espanola District	*9,911.59*				12,900.81	12,900.81
Patricia District	115,634.16	100,467.37			506,880.79	506,880.79
St. Joseph District	274,742.07	4,216.08			682,238.08	682,238.08
	1,413,984.42	313,892.46	922,742.37	6,283,290.90	24,633,763.39	31.839,796.66

NORTHERN ONTARIO

(Operated by The Hydro-Electric

Depreciation Reserves

	Nipissing District	Sudbury District
	$ c.	$ c.
Balances at November 1, 1935	292,533.06	145,274.02
Deduct—amount transferred to contingencies	15,211.36	....
	277,321.70	145,274.02
Depreciation provision for the year:		
Principal—as per income statement	17,751.77	27,709.72
Interest on reserves' balances	11,701.32	5,810.96
Total provision	29,453.09	33,520.68
Sub-total	306,774.79	178,794.70
Expenditures for the year	2,637.58	1,360.15
Balances at October 31, 1936	304,137.21	177,434.55

Contingency Reserves

	Nipissing District	Sudbury District
	$ c.	$ c.
Balances at November 1, 1935	153,750.17	122,637.63
Add—amount transferred from depreciation and obsolescence reserves	15,211.36	....
	168,961.53	122,637.63
Contingency provision for the year:		
Principal—as per income statement	8,597.49	18,473.14
Interest on reserves' balances	6,150.01	4,905.51
Total provision	14,747.50	23,378.65
Sub-total	183,709.03	146,016.28
Contingencies met with during the year	8,347.76	29,795.38
Balances at October 31, 1936	175,361.27	116,220.90

Sinking Fund Reserves

	Nipissing District	Sudbury District
	$ c.	$ c.
Balances at November 1, 1935	17,633.87	28,723.20
Sinking Fund appropriation for the year:		
Principal—as per income statement	17,627.38	28,822.17
Interest on reserves' balances	705.35	1,148.93
Total provision	18,332.73	29,971.10
Balances at October 31, 1936	35,966.60	58,694.30

PROPERTIES

Power Commission of Ontario)

—October 31, 1936

Abitibi District	Espanola District	Patricia District	St. Joseph District	Total for Northern Ontario Properties
$ c.	$ c.	$ c.	$ c.	$ c.
377,481.05	478.69	38,555.71	....	854,322.53
....	....	....	....	15,211.36
377,481.05	478.69	38,555.71	....	839,111.17
188,750.34	193.51	....	....	234,405.34
15,099.24	19.15	1,542.23	....	34,172.90
203,849.58	212.66	1,542.23	....	268,578.24
581,330.63	691.35	40,097.94	....	1,107,689.41
61.50	....	39.05	....	4,098.28
581,269.13	691.35	40,058.89	....	1,103,591.13

—October 31, 1936

Abitibi District	Espanola District	Patricia District	St. Joseph District	Total for Northern Ontario Properties
$ c.	$ c.	$ c.	$ c.	$ c.
....	249.80	9,396.23	....	286,033.83
....	....	....	....	15,211.36
....	249.80	9,396.23	....	301,245.19
....	129.01	....	....	27,199.64
....	9.99	375.85	....	11,441.36
....	139.00	375.85	....	38,641.00
....	388.80	9,772.08	....	339,886.19
....	....	540.95	....	38,684.09
....	388.80	9,231.13	....	301,202.10

—October 31, 1936

Abitibi District	Espanola District	Patricia District	St. Joseph District	Total for Northern Ontario Properties
$ c.	$ c.	$ c.	$ c.	$ c.
243,590.80	263.03	25,377.50	19,676.43	335,264.83
269,780.82	135.85	25,657.65	35,646.74	377,670.61
9,743.63	10.52	888.21	688.68	13,185.32
279,524.45	146.37	26,545.86	36,335.42	390,855.93
523,115.25	409.40	51,923.36	56,011.85	726,120.76

THE HAMILTON STREET RAILWAY COMPANY

(A Subsidiary of The Hydro-Electric Power Commission of Ontario—
Niagara System)

FINANCIAL ACCOUNTS

For the Year ended October 31, 1936

Balance Sheet as at October 31, 1936

Income Account for the Year ended October 31, 1936

THE HAMILTON STREET

(A Subsidiary of The Hydro-Electric Power

Balance Sheet as at

ASSETS

INVESTMENTS:		
Properties, road and equipment, buses, franchises, etc.	$4,744,561.42	
Less—Surplus created by advances from The Dominion Power and Transmission Company, Limited, prior to acquisition by The Hydro-Electric Power Commission of Ontario at December 31, 1929	488,846.85	
		$4,255,714.57
CURRENT AND ACCRUED ASSETS:		
Cash	$6,699.59	
Accounts receivable	2,664.95	
		9,364.54
DEFERRED DEBITS:		
Material and supplies	$42,865.28	
Conductors' and employees' advances	13,445.00	
Prepayments	5,531.37	
		61,841.65
		$4,326,920.76

Approved by:—

A. MURRAY MCCRIMMON - Secretary and Controller.

T. S. LYON - - - - - - - - President.

T. B. MCQUESTEN - - - - - - Director.

RAILWAY COMPANY

Commission of Ontario—Niagara System)

October 31, 1936

LIABILITIES, RESERVES AND CAPITAL

CAPITAL STOCK:		
Authorized: 80,000 shares of a par value of $50.00 each	$4,000,000.00	
Issued: 64,100 shares of a par value of $50.00 each		$3,205,000.00
ADVANCES FROM THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO:		
Advances for working funds		102,500.16
CURRENT AND ACCRUED LIABILITIES:		
Accounts payable		12,543.22
RESERVES:		
Reserve for depreciation–road and equipment	$978,968.97	
Insurance reserves	27,036.78	
Operating reserves	19,496.37	
		1,025,502.12
CORPORATE DEFICIT:		
Credit balance, October 31, 1935	$7,208.78	
Net loss for the year ended October 31, 1936	25,833.52	
Debit balance, October 31, 1936		*18,624.74*
		$4,326,920.76

Auditors' Certificate

We have examined the Books and Accounts of The Hamilton Street Railway Company for the year ended the 31st October, 1936, and report that, subject to the comments contained in our Annual Report on the Accounts of The Hydro-Electric Power Commission of Ontario, in our opinion the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Company's affairs at the 31st October, 1936, according to the best of our information and the explanations given to us and as shown by the books of the Company. We have obtained all the information and explanations we have required.

OSCAR HUDSON AND CO.,
Chartered Accountants,
Auditors.

Dated at Toronto, Ontario,
28th April, 1937.

THE HAMILTON STREET RAILWAY COMPANY

(A Subsidiary of The Hydro-Electric Power Commission of Ontario—Niagara System)
Operating and Income Accounts for the Year Ended October 31, 1936

Operating Account

	Tramways	Buses	Total
	$ c.	$ c.	$ c.
OPERATING REVENUES:			
Revenue from transportation	795,784.65	200,525.31	996,309.96
Revenue from other operations	6,065.02	574.77	6,639.79
Operating revenues	801,849.67	201,100.08	1,002,949.75
OPERATING EXPENSES:			
Maintenance of way and structures	119,518.96		119,518.96
Maintenance of equipment	71,267.76	42,769.40	114,037.16
Power purchased	156,692.52		156,692.52
Transportation expenses	260,348.04	112,492.14	372,840.18
Traffic expenses	30.00		30.00
General and miscellaneous expenses	73,224.63	11,131.34	84,355.97
Depreciation provision	150,000.00	6,763.72	156,763.72
Operating expenses	831,081.91	173,156.60	1,004,238.51
NET OPERATING DEFICIT	29,232.24	*27,943.48*	1,288.76
Taxes	23,429.90	1,920.00	25,349.90
NET OPERATING LOSS	52,662.14	*26,023.48*	26,638.66

Income Account

NET OPERATING LOSS (as above)		$26,638.66
Interest on advances from Niagara System		6,257.45
NET LOSS		$32,896.11
MISCELLANEOUS CREDITS (net):		
Adjustment of interest on open account—T.H. & B. Rly	$2,124.12	
Adjustment of expenditure claim against the T.H. & B. Rly	*995.78*	
Reduction in operating reserve for tire replacements	5,934.25	
		7,062.59
DEBIT BALANCE TRANSFERRED TO DEFICIT ACCOUNT		$25,833.52

GUELPH RADIAL RAILWAY

(Operated by The Hydro-Electric Power Commission of Ontario)

FINANCIAL ACCOUNTS

For the Year ended October 31, 1936

Balance Sheet as at October 31, 1936

Operating and Income Accounts for the Year ending October 31, 1936

GUELPH RADIAL

(Operated by The Hydro-Electric

Balance Sheet as at

ASSETS

INVESTMENTS:			
Road and equipment			$441,193.53
CURRENT AND ACCRUED ASSETS:			
Cash		$39,024.38	
Miscellaneous accounts receivable		1,698.35	
Interest receivable		1,237.50	
		$41,960.23	
City of Guelph:			
Operating deficit for year ended October 31, 1936	$42,267.45		
Less:—Amount due to the City of Guelph as per purchase agreement	11,700.00		
	$30,567.45		
Payment on deficit for the year ended October 31, 1936	37,458.43		
		6,890.98	
			35,069.25
DEFERRED DEBITS:			
Materials and supplies		$6,363.18	
Employees' working funds		850.00	
Prepayments		1,020.45	
			8,233.63
SPECIAL FUNDS:			
Reserve fund investments			59,141.37
			$543,637.78

Approved by:—

A. MURRAY MCCRIMMON - Secretary and Controller.
T. S. LYON - - - - Chairman of the Commission.
T. B. MCQUESTEN - - - - - Commissioner.

RAILWAY

Power Commission of Ontario)

October 31, 1936

LIABILITIES, RESERVES AND EQUITY

LONG-TERM DEBT:		
5% Hydro-Radial debentures due November 1, 1970 (Issued for extensions and betterments, secured by $300,000.00 5% City of Guelph debentures due May 1, 1971)		$300,000.00
CURRENT AND ACCRUED LIABILITIES:		
Accounts payable	$6,610.21	
Matured interest unpaid	7,500.00	
		14,110.21
DEFERRED CREDITS:		
Premium on funded debt		20,520.68
RESERVES:		
Reserve for depreciation—road and equipment	$37,102.38	
Operating reserves	2,872.65	
		39,975.03
EQUITY OF THE CITY OF GUELPH:		
Purchase price of the railway as per purchase agreement of December 8, 1920	$150,000.00	
Less:—Thirty-one instalments thereon	109,257.98	
	$40,742.02	
Reserve:—Created by payment of instalments on the purchase price out of the revenue of the road and assessments against the City of Guelph	109,257.98	
Sinking fund reserve	19,031.86	
		169,031.86
		$543,637.78

Auditor's Certificate

We have examined the Books and Accounts of the Guelph Radial Railway for the year ended the 31st October, 1936, and report that, subject to the adequacy of the Reserve for Depreciation, in our opinion the above Balance Sheet is proprely drawn up so as to exhibit a true and correct view of the state of the Railway's affairs at the 31st October, 1936, according to the best of our information and the explanations given to us and as shown by the books of the Railway. We have obtained all the information and explanations we have required.

OSCAR HUDSON AND CO.,
Chartered Accountants,
Auditors.

Dated at Toronto, Ontario,
28th April, 1937.

GUELPH RADIAL RAILWAY

(Operated by The Hydro-Electric Power Commission of Ontario)

Operating and Income Accounts for the Year Ended October 31, 1936

Operating Account

	Tramways	Buses	Total
	$ c.	$ c.	$ c.
OPERATING REVENUES:			
Revenue from transportation	43,440.74	15,640.48	59,081.22
Revenue from other operations	490.55	40.45	531.00
Operating revenues	43,931.29	15,680.93	59,612.22
OPERATING EXPENSES:			
Maintenance of way and structures	5,002.61		5,002.61
Maintenance of equipment	9,839.61	2,417.08	12,256.69
Power purchased	11,422.70		11,422.70
Transportation expenses	16,158.35	10,749.21	26,907.56
Traffic expenses	31.00		31.00
General and miscellaneous expenses	8,810.89	2,439.37	11,250.26
Depreciation provision	1,153.73	6,052.56	7,206.29
Operating expenses	52,418.89	21,658.22	74,077.11
NET OPERATING DEFICIT	8,487.60	5,977.29	14,464.89
Taxes	246.47		246.47
NET OPERATING LOSS	8,734.07	5,977.29	14,711.36

Income Account

NET OPERATING LOSS (as above)			$14,711.36
NET INTEREST CHARGES:			
Interest on long-term debt		$15,000.00	
Amortization of premium on debt		246.97	
		$14,753.03	
Income from special funds	$2,379.12		
Miscellaneous interest income	287.31		
		2,666.43	
			12,086.60
NET LOSS			$26,797.96
SINKING FUND APPROPRIATION FOR THE YEAR:			
Principal		$3,159.00	
Interest		610.49	
			3,769.49
DEFICIENCY AFTER SINKING FUND APPROPRIATION			$30,567.45
MISCELLANEOUS DEBITS:			
Reserve appropriation—instalment on purchase agreement			11,700.00
TOTAL DEFICIT CHARGED TO THE CITY OF GUELPH			$42,267.45

SECTION X

MUNICIPAL ACCOUNTS

and

Statistical Data Relating to Hydro-Electric Distribution Systems Operated by Individual Municipalities Served by The Hydro-Electric Power Commission of Ontario

The Municipal Accounts section of this report presents in summary, and individually, the results of the operation of the local electrical utilities in municipalities owning their own distributing systems and operating with energy supplied by or through The Hydro-Electric Power Commission.

Financial statements prepared from the books of these "Hydro" utilities are submitted herein to show how each has operated during the past year, and its financial status at the present time. Other tables give useful statistical information respecting average costs for the various classes of service and the rates in force.

The books of account of the electrical utilities in all municipalities which have contracted with The Hydro-Electric Power Commission of Ontario for a supply of power are kept in accordance with an accounting system designed by the Commission.

Periodical inspections are made of the books of all "Hydro" electrical utilities and local officials are assisted in the improvement of their office routine with a view to standardizing, as far as possible, the methods employed. In the majority of the smaller municipalities much of the bookkeeping for the electrical utilities is performed by representatives of the municipal accounting department of the Commission as a measure of economy. This arrangement insures the correct application of the standard accounting system, with resultant uniformity in classification of revenues and expenditures; secures true reflections of the actual operating results for the year, and greatly enhances the comparative values of the reports.

The first financial statement in this section presents consolidated balance sheets for each year since 1913, and thus shows the march of progress. It combines the balance sheets of the local municipal utilities of all the systems. It is worth noting that the total plant value has increased from $10,081,469.16 in 1913 to $93,438,204.30 in 1936, and the total assets from $11,907,826.86

to $152,039,550.63. The liabilities have not increased in the same proportion as the assets, rising from $10,468,351.79 to a maximum of $52,685,316.86 in 1932 and receding to $40,657,706.42 in 1936. The reasons for this are the regular fulfilment of debt retirement schedules under serial debenture provisions or by maturity of sinking funds, and also the fact that much of the cost of the increasing plant value has been financed out of reserves and surplus without increasing the capital liabilities of the respective utilities. By this procedure the funds of the systems are used to best advantage. Examination of the results will also show that there is a steady decline in the percentage of net liabilities to total assets; being from 88.0 per cent in 1913 to 28.3 per cent in 1936. The equities in The Hydro-Electric Power Commission's systems automatically acquired through the inclusion of sinking funds as part of the cost of power are not taken into account in arriving at these percentages.

The second financial statement presents consolidated operating reports for each year since "Hydro" service was inaugurated and combines the results from the local municipal utilities of all the systems. After providing for every cost of operation and fixed charges, including the standard provision for depreciation, the combined operating reports show a net surplus of $1,929,364.17 for 1936.

The five statements, "A" to "E," following the two consolidated reports show the financial status of each municipal utility and the results of operations, giving classified information respecting revenue, operating costs, number of consumers and consumption, cost of power to municipalities, power and lighting rates charged to consumers, etc. In statements "A" and "B", the municipalities are arranged alphabetically under each system; in statement "D" the municipalities are arranged in three groups—cities, towns and small municipalities; in statements "C" and "E" all municipalities are arranged alphabetically.

Statement "A" presents the balance sheet of each electrical utility. The plant values are shown under the general subdivisions specified in the standard accounting system and the other items on the positive side of the ledger which are included in total assets are self-explanatory with the exception, perhaps, of the item entitled "equity in H-E.P.C. systems." The sinking fund portion of the cost paid year by year to the Commission for power is for the purpose of ultimately retiring the capital liabilities incurred by the Commission on behalf of the municipalities. A municipality's aggregate equity in the Commission's systems at any time is the total of the sinking fund payments that have been credited to it, together with interest. The total sinking fund equity acquired by these municipalities to the end of 1936 is shown in the consolidated balance sheet to be $36,193,874.21.

In conformity with a policy of service at cost to the customer, refunds by cash or credit were made during the year in many municipalities from surplus funds accrued to the credit of municipal services, such as street lighting, water works, sewage disposal, etc., and to individual customers. The amounts of the accumulated surpluses rebated equalled, in different municipalities, from five per cent to twenty-five per cent of the previous year's revenue. The total thus returned to customers during the year 1936 amounted in round figures to $275,000.00.

In each case the balance sheet includes the credit or charge representing the difference between the monthly payments for power at interim rates and the cost of power as ascertained by the Commission upon annual adjustment.

The reserves for depreciation, and the acquired equity in The Hydro-Electric Power Commission's systems, are listed individually and totalled; and under the heading "surplus" are included not only the free operating surplus but the accumulation of sinking fund applicable to debenture debt and also the amount of debentures already retired out of revenue.

The depreciation reserve now amounts to 23.7 per cent of the total depreciable plant, while the depreciation reserve and surplus combined have already reached the sum of $72,451,735.54, approximately 77.5 per cent of the total plant cost.

Statement "B" shows detailed operating reports for each municipal electrical utility. It gives annual revenues from the various classes of consumers; the items of expenditure which make up the total annual expenditure and the sums set aside for depreciation. The population served by each local utility, and the number of consumers of each class are also shown.

The item "power purchased" in this statement includes the debit or credit balances ascertained by the annual adjustment of the cost of power supplied to the municipalities by the Commission.

Of the 283 municipal electric utilities included in this statement, 266 received from consumers revenue sufficient to meet in full all operating expenses, interest, debt retirement instalments, and standard depreciation reserve allocation and to yield an aggregate net surplus of $1,933,752.60 for the year; 16 were able to defray out of revenue all such charges except a portion of the standard depreciation allocation aggregating $3,875.60, in the case of one utility the revenue was less than the total of operating expenses, interest and debt retirement instalments by $113.83.

Statement "C" shows the installation of street lights in each municipality together with the rates approved by this Commission, the revenue for 1936 and the cost per capita in each municipality.

Statement "D" presents statistics relating to the supply of electrical energy to consumers in Ontario municipalities served by the Commission. It shows the revenue, kilowatt-hour consumption, number of consumers, average monthly consumption, average monthly bill and the net average cost per kilowatt-hour both for domestic and for commercial light service in each municipality. For power service this statement shows the revenue, the number of consumers and the average horsepower supplied by the municipal utility.* For further reference to this informative statement, consult the special introduction to it on page 420.

Statement "E" presents the cost per horsepower of the power provided for and delivered to the municipalities by the Commission, and the local rates to consumers in force in the respective municipalities, during the year 1936, for domestic service, for commercial light service and for power service.

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*The statistics include retail power only. Wholesale industrial power as supplied by the Commission direct, is reported in Section IX.

CONSOLIDATED

YEAR	1913	1914	1915
Number of municipalities included	45	69	99
ASSETS	$ c.	$ c.	$ c.
Lands and buildings	626,707.34	791,732.20	873,838.18
Substation equipment	1,090,875.69	1,476,087.84	1,582,062.56
Distribution system—overhead	2,690,834.74	3,422,763.93	4,234,626.05
Distribution system—underground	644,514.24	807,153.53	928,420.77
Line transformers	615,546.20	787,613.52	981,754.70
Meters	840,606.64	1,172,475.11	1,418,165.08
Street lighting equipment—regular	900,614.80	1,071,255.37	1,309,628.49
Street lighting equipment—ornamental.	62,765.34	270,386.55	197,644.82
Miscellaneous construction expenses	866,551.89	2,062,035.90	1,701,182.66
Steam or hydraulic plant	1,401,175.28	420,108.33	461,651.60
Old plant	341,277.00	619,513.12	1,184,372.86
Total plant	10,081,469.16	12,901,125.40	14,873,347.77
Bank and cash balance	450,887.97	422,350.12	284,653.96
Securities and investments			
Accounts receivable	344,487.95	561,873.08	602,920.69
Inventories	540,274.58	615,226.76	726,556.76
Sinking fund on local debentures	431,747.27	625,217.03	868,983.78
Equity in H-E.P.C. systems			
Other assets	58,959.93	123,410.97	326,801.11
Total assets	11,907,826.86	15,249,203.36	17,683,264.07
LIABILITIES			
Debenture balance	8,711,308.37	10,678,078.36	11,831,811.03
Accounts payable	1,553,711.45	1,682,150.29	2,040,038.01
Bank overdraft	160,919.16	228,622.50	292,106.44
Other liabilities	42,412.81	113,838.66	37,388.31
Total liabilities	10,468,351.79	12,702,689.81	14,201,343.79
RESERVES			
For equity in H-E.P.C. systems			
For depreciation	478,145.88	850,618.07	1,337,739.73
Other reserves			
Total reserves	478,145.88	850,618.07	1,337,739.73
SURPLUS			
Debentures paid	202,751.26	320,129.10	394,466.22
Local sinking fund	431,747.27	625,217.03	868,983.78
Operating surplus	326,830.66	750,549.35	880,730.55
Total surplus	961,329.19	1,695,895.48	2,144,180.55
Total liabilities, reserves and surplus	11,907,826.86	15,249,203.36	17,683,264.07
Percentage of net debt to total assets	88.0	88.3	80.3

NOTE.—In computing the "percentage of net debt to total assets" the ornamental street lighting capital, sinking fund on local debentures, and equity in H-E.P.C. systems, are excluded from assets; and the total liabilities are reduced by the amount of the local sinking fund reserve,

BALANCE SHEET

1916	1917	1918	1919	1920
128	143	166	191	195
$ c.	$ c.	$ c.	$ c.	$ c.
1,335,936.33	1,546,241.41	1,859,888.69	1,995,545.83	2,175,568.24
1,934,626.12	2,471,293.82	2,820,488.70	2,915,125.56	3,231,050.80
4,832,353.27	6,090,073.42	6,627,237.39	7,445,820.31	8,579,881.49
1,095,709.62	1,157,059.90	1,216,288.59	1,206,296.88	1,313,369.29
1,179,132.07	1,483,839.44	1,772,691.35	2,073,113.45	2,560,581.59
1,711,299.49	1,999,095.48	2,238,143.70	2,587,566.32	3,053,135.20
1,251,057.13	1,237,734.69	1,200,625.65	1,206,638.71	1,269,006.98
306,388.95	361,975.74	531,502.61	546,497.68	557,678.13
2,059,263.42	2,184,015.84	2,395,096.50	2,530,101.08	2,697,636.12
864,500.01	896,753.20	214,575.75	986,200.57	757,194.47
759,748.66	649,852.51	1,476,413.00	805,959.89	864,298.39
17,330,015.07	20,077,935.45	22,352,951.93	24,298,866.28	27,059,400.70
1,061,029.90	340,026.50	391,194.91	462,437.23	943,858.12
....	....	....	627,076.53	341,855.88
695,152.23	1,285,097.33	1,124,018.44	1,921,166.69	2,022,538.88
764,504.59	1,261,398.36	972,996.96	1,032,569.75	1,400,671.89
1,166,017.73	1,337,578.96	1,663,298.05	1,925,455.77	2,244,004.34
....	....	....	369,071.89	577,584.06
342,215.87	125,240.05	444,787.63	86,216.05	25,447.07
21,358,935.39	24,427,276.65	26,949,247.92	30,722,860.19	34,615,360.94
15,058,641.57	15,593,773.61	17,209,217.70	18,133,462.44	19,268,072.04
969,187.75	1,537,669.11	1,007,727.79	1,420,926.66	1,840,137.54
178,413.26	886,177.94	576,816.49	403,235.57	514,671.99
491,874.90	429,104.20	350,013.21	670,271.90	642,293.65
16,698,117.48	18,446,724.86	19,143,775.19	20,627,896.57	22,265,175.22
....	....	....	373,871.89	577,584.06
1,843,804.68	2,463,723.83	3,133,550.17	3,750,162.28	4,788,645.03
....	....	....	....	....
1,843,804.68	2,463,723.83	3,133,550.17	4,124,034.17	5,366,229.09
549,778.59	694,797.90	920,076.56	1,328,657.68	1,440,156.52
1,165,785.94	1,340,615.38	1,662,602.69	1,754,020.37	2,246,474.47
1,101,448.70	1,481,414.68	2,089,243.31	2,888,251.40	3,297,325.64
2,817,013.23	3,516,827.96	4,671,922.56	5,970,929.45	6,983,956.63
21,358,935.39	24,427,276.65	26,949,247.92	30,722,860.19	34,615,360.94
78.4	75.5	71.0	67.9	65.4

and the liability in respect to the ornamental street lighting capital, which amount is included in other liabilities.

CONSOLIDATED

YEAR	1921	1922	1923
Number of municipalities included	215	226	235
ASSETS	$ c.	$ c.	$ c.
Lands and buildings	3,230,985.63	3,334,522.68	4,488,054.93
Substation equipment	5,403,689.90	5,046,857.98	6,015,919.75
Distribution system—overhead	8,397,361.48	11,165,330.24	13,135,581.76
Distribution system—underground	1,401,135.97	1,598,053.02	1,959,120.41
Line transformers	3,077,649.83	3,618,684.73	4,211,655.89
Meters	3,552,076.79	4,033,689.52	4,548,933.73
Street lighting equipment—regular	1,335,997.13	1,419,016.05	1,061,473.85
Street lighting equipment—ornamental	610,586.70	666,084.50	708,431.22
Miscellaneous construction expenses	3,030,134.16	3,261,495.74	3,681,274.88
Steam or hydraulic plant	704,848.46	565,158.54	566,619.86
Old plant	912,388.55	7,997,947.87	8,051,496.28
Total plant	31,656,854.60	42,706,840.87	48,428,562.56
Bank and cash balance	900,842.34	1,164,336.24	1,276,140.06
Securities and investments	477,678.69	443,938.18	1,153,424.47
Accounts receivable	2,155,788.62	3,874,317.14	3,198,769.34
Inventories	1,504,596.28	1,738,795.96	1,819,711.62
Sinking fund on local debentures	2,541,718.35	3,416,231.45	3,896,261.28
Equity in H-E.P.C. systems	795,570.51	1,543,434.12	2,929,603.94
Other assets	78,929.84	238,940.13	190,071.63
Total assets	40,111,979.23	55,126,834.09	62,892,544.90
LIABILITIES			
Debenture balance	21,619,220.99	30,454,186.12	33,056,501.29
Accounts payable	1,887,567.93	3,699,292.52	3,708,781.76
Bank overdraft	989,099.98	456,706.69	680,714.59
Other liabilities	938,368.84	586,203.02	1,517,828.47
Total liabilities	25,434,257.74	35,196,388.35	38,963,826.11
RESERVES			
For equity in H-E.P.C. systems	800,249.05	1,543,434.12	2,929,603.94
For depreciation	5,491,858.93	6,512,813.92	7,328,858.69
Other reserves	....	....	....
Total reserves	6,292,107.98	8,056,248.04	10,258,462.63
SURPLUS			
Debentures paid	1,860,079.53	3,104,591.15	2,852,038.38
Local sinking fund	2,541,718.35	3,416,231.45	3,896,261.28
Operating surplus	3,983,815.63	5,353,375.10	6,921,956.50
Total surplus	8,385,613.51	11,874,197.70	13,670,256.16
Total liabilities, reserves and surplus	40,111,979.23	55,126,834.09	62,892,544.90
Percentage of net debt to total assets	64.7	63.3	62.6

BALANCE SHEET—Continued

1924	1925	1926	1927	1928
248	247	251	252	256
$ c.	$ c.	$ c.	$ c.	$ c.
4,561,648.92	5,768,855.99	6,111,162 54	6,486,426.89	7,024,646.76
6,800,238.00	8,543,166.55	9,505,501.77	15,088,905.14	16,866,186.21
14,182,190.33	16,837,535.57	18,654,240.54	16,689,462.41	17,688,050.68
2,873,446.13	3,388,837.09	3,689,569.95	3,278,382.58	3,559,288.16
4,456,669.02	5,079,754.23	5,538,605.24	5,985,521.37	6,549,674.64
5,149,629.71	5,533,483.92	5,963,162.51	6,346,660.59	6,839,802.90
1,134,491.77	1,256,916.53	1,309,608.30	1,399,314.06	1,486,646.24
728,298.08	893,186.48	1,103,660.23	1,184,035.82	1,203,706.65
4,168,262.21	4,485,110.96	3,456,777.71	3,360,671.09	3,394,626.92
4,196,803.45	568,912.49	628,909.57	607,320.00	619,880.93
5,587,420.31	4,549,142.46	4,655,422.59	5,095,555.90	5,032,089.26
53,839,097.93	56,904,902.27	60,616,620.95	65,522,255.85	70,264,599.35
1,748,912.34	1,700,145.30	2,136,290.79	3,014,832.48	1,342,367.07
1,329,622.58	1,095,662.92	1,400,316.43	1,696,237.66	1,837,140.51
3,898,751.89	3,417,558.86	3,508,817.87	3,715,770.72	4,097,446.13
1,745,628.16	1,711,504.13	1,397,667.83	1,412,729.41	1,220,186.10
4,520,723.06	5,202,451.70	5,599,675.01	6,398,909.77	7,071,273.69
5,420,567.58	7,551,588.70	8,046,868.53	10,143,205.66	12,326,097.56
250,292.77	137,280.05	33,151.81	31,942.45	153,275.04
72,753,596.31	77,721,093.93	82,739,409.22	91,935,884.00	98,312,385.45
38,005,162.50	37,919,225.01	39,602,533.48	42,891,361.57	42,597,175.78
3,117,224.08	3,139,067.92	3,118,684.78	2,988,621.90	3,074,634.25
162,100.71	226,147.82	163,725.53	252,362.52	253,143.81
1,780,564.27	1,075,914.83	1,087,795.08	1,154,810.24	1,258,610.23
43,065,051.56	42,360,355.58	43,972,738.87	47,287,156.23	47,183,564.07
5,420,567.58	7,551,588.70	8,046,868.53	10,143,205.66	12,326,097.56
8,097,834.68	8,699,437.68	9,360,322.27	10,319,889.05	11,140,795.68
....	1,157,147.20	947,970.23	1,002,916.69	1,117,257.63
13,518,402.26	17,408,173.58	18,355,161.03	21,466,011.40	24,584,150.87
3,530,610.35	4,440,138.34	5,493,879.83	6,648,767.38	7,928,907.61
4,520,723.06	5,202,451.70	5,599,675.01	6,398,909.77	7,071,273.69
8,118,809.08	8,309,974.73	9,317,954.48	10,135,039.22	11,544,489.21
16,170,142.49	17,952,564.77	20,411,509.32	23,182,716.37	26,544,670.51
72,753,596.31	77,721,093.93	82,739,409.22	91,935,884.00	98,312,385.45
61.4	57.2	55.5	54.2	50.8

CONSOLIDATED

YEAR	1929	1930	1931
Number of municipalities included	260	267	275
ASSETS	$ c.	$ c.	$ c.
Lands and buildings	7,469,451.46	7,936,974.31	8,407,664.48
Substation equipment	18,102,792.13	19,485,056.28	21,013,956.74
Distribution system—overhead	18,108,016.82	19,220,326.48	19,918,355.76
Distribution system—underground	4,823,369.60	4,932,189.05	5,361,627.24
Line transformers	7,312,742.17	7,953,090.23	8,649,875.07
Meters	7,405,478.91	7,840,948.07	8,106,202.88
Street lighting equipment—regular	1,594,183.25	1,780,785.67	2,205,613.18
Street lighting equipment—ornamental	1,458,349.64	1,520,891.01	1,456,742.91
Miscellaneous construction expenses	3,483,487.78	3,996,747.77	3,827,132.05
Steam or hydraulic plant	489,097.57	139,587.28	458,374.05
Old plant	5,093,378.75	5,322,690.14	7,146,437.96
Other plants not distributed	....	....	....
Total plant	75,340,348.08	80,129,286.29	86,551,982.32
Bank and cash balance	858,733.68	2,722,250.12	2,738,319.67
Securities and investments	2,001,088.81	1,909,439.11	1,999,846.42
Accounts receivable	4,683,201.97	4,481,006.92	3,957,972.78
Inventories	1,365,033.58	1,242,994.51	1,276,531.01
Sinking fund on local debentures	7,753,613.88	8,396,255.47	8,735,050.84
Equity in H-E.P.C. systems	14,754,865.40	17,346,372.44	20,103,275.76
Other assets	152,260.86	173,030.05	174,879.28
Total assets	106,909,146.26	116,400,634.91	125,537,858.08
LIABILITIES			
Debenture balance	42,930,127.74	45,091,808.06	44,594,400.03
Accounts payable	3,132,145.03	3,001,186.21	5,382,306.13
Bank overdraft	412,056.69	405,663.14	312,575.54
Other liabilities	1,621,378.17	1,642,771.59	1,909,986.13
Total liabilities	48,095,707.63	50,141,429.00	52,199,267.83
RESERVES			
For equity in H-E.P.C. systems	14,754,865.40	17,346,372.44	20,103,275.76
For depreciation	11,911,154.49	12,885,387.51	13,748,049.68
Other reserves	1,437,371.26	1,574,655.74	1,693,129.83
Total reserves	28,103,391.15	31,806,415.69	35,544,455.27
SURPLUS			
Debentures paid	9,194,253.59	10,728,279.15	13,150,040.37
Local sinking fund	7,962,121.20	8,396,255.47	8,735,050.84
Operating surplus	13,553,672.69	15,328,255.60	15,909,043.77
Total surplus	30,710,047.48	34,452,790.22	37,794,134.98
Total liabilities, reserves and surplus	106,909,146.26	116,400,634.91	125,537,858.08
Percentage of net debt to total assets	47.8	46.0	44.1

BALANCE SHEET—Concluded

1932	1933	1934	1935	1936
280	282	282	284	283
$ c.	$ c.	$ c.	$ c.	$ c.
9,503,743.78	10,186,471.28	10,262,692.98	10,381,191.41	10,528,595.34
22,288,781.68	22,306,800.94	22,327,618.75	22,072,115.14	22,162,208.03
20,866,767.32	21,152,681.20	21,353,725.80	21,650,567.75	22,163,701.17
5,820,056.75	5,945,225.61	6,031,767.74	6,068,724.47	6,070,337.02
9,392,662.62	9,478,605.14	9,635,279.35	9,678,578.13	9,845,939.94
8,403,251.67	8,514,165.03	8,624,504.78	8,767,892.27	9,043,615.65
2,257,618.20	2,381,599.40	2,395,296.48	2,420,238.81	2,527,188.03
1,545,354.93	1,458,443.68	1,464,306.73	1,486,302.46	1,504,596.77
4,120,926.11	4,040,859.74	3,907,359.92	3,616,986.74	4,019,430.59
498,231.69	502,978.62	494,932.96	496,050.14	496,186.33
4,989,654.97	5,016,755.92	4,978,079.44	4,917,917.43	4,876,405.43
200,000.00	200,000.00	200,000.00	200,000.00	200,000.00
89,887,049.72	91,184,586.56	91,675,564.93	91,756,564.75	93,438,204.30
3,185,442.00	1,696,489.24	2,215,914.31	2,927,485.90	3,921,121.28
2,059,325.10	2,163,785.20	2,382,446.41	2,593,633.59	2,924,913.30
3,683,059.42	3,746,910.92	4,001,596.09	4,363,297.95	4,560,713.55
1,232,209.52	1,226,043.30	1,110,705.38	1,212,063.37	1,261,843.81
9,099,210.61	9,386,176.58	9,161,419.77	9,086,152.46	9,535,712.83
23,066,129.81	26,045,679.00	29,274,340.46	32,609,979.83	36,193,874.21
163,637.79	253,581.84	289,158.19	301,317.86	203,167.35
132,376,063.97	135,703,252.64	140,111,145.54	144,850,495.71	152,039,550.63
45,133,305.97	42,606,145.29	39,646,989.68	36,667,080.62	34,485,507.43
3,512,724.58	3,320,485.45	3,149,035.07	2,931,934.14	2,879,497.45
298,910.20	206,398.00	143,556.95	72,084.93	25,559.95
3,740,376.11	3,787,725.14	3,669,008.56	3,462,906.61	3,267,141.59
52,685,316.86	49,920,753.88	46,608,590.26	43,134,006.30	40,657,706.42
23,066,129.81	26,045,679.00	29,274,340.46	32,609,979.83	36,193,874.21
14,902,177.02	16,075,959.28	17,426,809.32	18,410,891.84	19,666,170.18
1,902,308.64	2,048,081.84	2,056,820.81	2,459,074.98	2,763,100.40
39,870,615.47	44,169,720.12	48,757,970.59	53,479,946.65	58,623,144.79
15,244,778.28	17,651,367.71	20,608,129.73	23,481,974.13	26,084,294.84
9,099,210.61	9,386,176.58	9,161,419.77	9,086,152.46	9,535,712.83
15,476,142.75	14,575,234.35	14,975,035.19	15,668,416.17	17,138,691.75
39,820,131.64	41,612,778.64	44,744,584.69	48,236,542.76	52,758,699.42
132,376,063.97	135,703,252.64	140,111,145.54	144,850,495.71	152,039,550.63
43.4	40.4	35.9	32.0	28.3

CONSOLIDATED

YEAR	1912	1913	1914	1915
Number of municipalities included	28	45	69	99
EARNINGS	$ c.	$ c.	$ c.	$ c.
Domestic service		572,154.38	789,130.81	944,271.08
Commercial light service		525,438.16	673,803.92	720,209.26
Commercial power service		905,378.17	1,214,829.31	1,501,797.78
Municipal power				
Street lighting		560,925.56	698,409.71	835,970.87
Rural service				
Miscellaneous		53,543.24	57,482.41	68,046.29
Total earnings	1,617,674.00	2,617,439.51	3,433,656.16	4,070,295.28
EXPENSES				
Power purchased		789,632.87	1,045,752.65	1,484,666.00
Substation operation		78,394.81	97,658.90	107,607.31
Substation maintenance		18,698.46	31,790.99	25,935.56
Distribution system, operation and maintenance		104,114.51	130,998.65	154,409.71
Line transformer maintenance		8,547.61	11,764.32	11,508.92
Meter maintenance		5,222.19	9,536.07	12,899.14
Consumers' premises expenses		53,108.38	65,192.23	47,494.26
Street lighting, operation and maintenance		84,903.76	113,047.80	136,983.38
Promotion of business		72,303.51	86,683.02	74,402.55
Billing and collecting		77,351.76	103,560.71	131,541.27
General office, salaries and expenses		154,932.69	230,899.75	236,777.86
Undistributed expense		65,423.64	89,350.91	129,209.15
Interest		528,549.21	662,092.34	817,978.89
Sinking fund and principal payments on debentures		*	*	*
Total expenses	1,377,168.00	2,041,183.40	2,678,328.34	3,371,414.00
Surplus	240,506.00	576,256.11	755,327.82	698,881.28
Depreciation and other reserves	124,992.47	262,675.24	357,883.31	414,506.99
Surplus less depreciation	115,513.53	313,580.87	397,444.51	284,374.29

*Debenture payments included in "Interest."

OPERATING REPORT

1916	1917	1918	1919	1920
128	143	166	181	186
$ c.	$ c.	$ c.	$ c.	$ c.
1,172,878.96	1,417,460.31	1,632,272.12	1,991,632.31	2,546,345.30
812,130.78	899,023.72	968,399.42	1,175,143.56	1,512,854.63
1,921,152.31	2,665,280.65	3,417,248.37	3,443,107.13	3,752,188.22
				532,279.09
930,057.48	967,495.10	902,875.55	988,900.95	1,005,535.11
				168,919.95
147,381.50	120,805.39	161,243.70	228,270.65	189,778.63
4,983,601.03	6,070,065.17	7,082,039.16	7,827,054.60	9,707,900.93
1,959,446.83	2,573,879.37	2,807,769.33	3,284,490.68	4,216,667.87
153,761.08	203,091.20	238,257.34	217,638.89	285,407.35
46,131.53	42,129.04	60,805.92	81,853.63	102,050.81
154,247.17	169,326.24	223,347.81	286,310.76	344,551.57
14,528.17	25,328.95	30,488.83	42,509.12	46,323.09
24,218.48	44,461.55	63,155.56	78,726.64	123,701.18
52,602.01	61,765.14	65,149.59	84,301.24	116,283.52
145,471.50	157,857.73	196,157.18	215,963.86	236,930.79
79,324.85	73,516.37	64,962.78	74,789.22	78,294.85
154,508.58	188,083.84	208,660.76	236,504.75	295,942.88
306,709.35	349,932.05	421,680.15	452,131.22	559,695.29
97,333.97	102,938.80	117,474.07	190,690.09	256,400.33
951,781.99	1,085,180.80	1,238,425.53	1,285,571.51	1,431,807.16
*	*	*	*	*
4,140,065.51	5,077,491.08	5,736,334.85	6,531,481.61	8,094,056.69
843,535.52	992,574.09	1,345,704.31	1,295,572.99	1,613,844.24
486,141.80	607,296.29	718,162.30	814,219.37	902,028.75
357,393.72	385,277.80	627,542.01	481,353.62	711,815.49

CONSOLIDATED

YEAR	1921	1922	1923
Number of municipalities included	205	214	224
EARNINGS	$ c.	$ c.	$ c.
Domestic service	3,149,080.03	3,786,608.23	5,166,452.24
Commercial light service	1,851,501.76	2,158,306.34	3,260,772.50
Commercial power service	3,895,437.46	4,383,912.97	5,927,666.37
Municipal power	654,531.01	973,263.38	1,161,598.60
Street lighting	1,060,357.77	1,160,446.81	1,269,604.48
Rural service	145,566.57	105,877.09	116,639.06
Miscellaneous	225,467.70	187,689.39	316,311.21
Total earnings	10,981,942.30	12,756,104.21	17 219,044.46
EXPENSES			
Power purchased	4,876,650.31	6,636,853.37	8,699,026.67
Substation operation	314,838.35	315,443.70	474,442.13
Substation maintenance	104,798.01	100,763.67	133,815.53
Distribution system, operation and maintenance	487,918.33	519,252.16	636,477.41
Line transformer maintenance	65,088.46	52,932.26	75,920.10
Meter maintenance	116,722.97	107,806.88	139,104.81
Consumers' premises expenses	134,854.92	143,388.88	218,682.02
Street lighting, operation and maintenance	297,481.52	297,363.86	299,579.08
Promotion of business	101,804.46	129,932.63	184,371.00
Billing and collecting	321,685.71	338,153.50	444,306.92
General office, salaries and expenses	656,268.11	605,852.50	937,463.47
Undistributed expense	308,874.42	385,895.03	359,206.91
Interest	998,611.47	1,074,657.44	1,615,205.16
Sinking fund and principal payments on debentures	532,183.96	635,469.90	990,907.14
Total expenses	9,317,781.00	11,343,765.78	15,208,508.35
Surplus	1,664,161.30	1,412,338.43	2,010,536.11
Depreciation and other reserves	1,044,434.85	715,814.24	916,782.75
Surplus less depreciation	619,726.45	696,524.19	1,093,753.36

OPERATING REPORT—Continued

1924	1925	1926	1927	1928
241	242	248	251	255
$ c.	$ c.	$ c.	$ c.	$ c.
5,993,231.07	6,439,159.86	7,372,602.62	8,189,866.89	8,925,050.56
3,566,227.22	3,866,292.79	4,187,899.19	4,626,815.51	5,182,723.32
6,222,865.88	6,568,854.77	6,789,217.54	7,342,173.20	8,298,669.44
1,352,966.47	1,923,093.09	1,922,512.34	1,913,502.88	1,921,300.97
1,356,668.97	1,415,382.22	1,457,686.21	1,489,242.37	1,534,476.98
75,100.24	37,975.18	37,810.73	13,765.72	48,451.90*
231,663.58	286,451.08	471,134.15	581,913.04	465,791.92
18,798,723.43	20,537,208.99	22,238,862.78	24,157,279.61	26,376,465.09
9,669,789.40	11,063,123.34	12,185,669.10	13,505,583.77	14,688,570.08
430,056.09	417,921.71	450,416.84	430,211.76	420,512.48
202,050.04	207,497.63	286,520.37	275,148.86	247,647.88
648,700.62	686,344.54	795,514.70	758,747.10	736,159.85
82,936.50	75,473.28	74,876.11	94,706.38	88,676.18
141,231.23	156,909.55	189,603.70	214,813.87	218,530.96
237,316.20	252,808.47	275,020.62	285,352.68	291,333.03
269,973.30	275,316.60	295,869.37	318,395.79	329,597.16
202,060.74	217,102.24	234,696.74	220,687.60	249,842.01
490,273.30	521,134.01	557,271.54	605,627.58	638,797.02
889,907.66	891,640.29	786,742.60	824,868.90	844,578.55
494,078.50	520,584.58	460,288.30	531,003.80	542,755.34
1,779,991.26	1,889,810.95	1,985,233.73	2,063,698.00	2,111,049.49
1,122,798.87	1,294,027.29	1,347,511.92	1,505,626.31	1,601,711.32
16,661,163.71	18,469,694.48	19,925,235.64	21,634,472.40	23,009,761.35
2,137,559.72	2,067,514.51	2,313,627.14	2,522,807.21	3,366,703.74
973,649.62	1,068,880.42	1,146,273.05	1,249,711.65	1,350,252.16
1,163,910.10	998,634.09	1,167,354.09	1,273,095.56	2,016,451.58

*See footnote on page 307.

CONSOLIDATED

YEAR	1929	1930	1931
Number of municipalities included	259	267	275
EARNINGS	$ c.	$ c.	$ c.
Domestic service	9,873,681.57	10,542,903.89	10,972,952.10
Commercial light service	5,697,766.06	5,961,383.23	6,230,475.89
Commercial power service	9,376,158.74	9,340,653.28	9,456,224.97
Municipal power	2,086,444.24	2,111,482.38	1,967,118.54
Street lighting	1,598,262.43	1,674,528.03	1,746,855.24
Merchandise*	51,590.54*	28,954.60*	29,446.38*
Miscellaneous	522,780.95	581,914.78	511,139.80
Total earnings	29,206,684.53	30,241,820.19	30,914,212.92
EXPENSES			
Power purchased	16,379,162.88	17,323,077.97	18,085,166.51
Substation operation	461,270.27	479,502.48	487,484.17
Substation maintenance	274,275.56	320,716.48	303,536.11
Distribution system, operation and maintenance	907,817.04	991,972.86	1,015,256.14
Line transformer maintenance	93,608.14	96,746.35	93,463.24
Meter maintenance	242,126.27	278,379.43	284,633.88
Consumers' premises expenses	314,495.03	317,902.45	363,078.47
Street lighting, operation and maintenance	359,373.40	372,211.17	368,119.49
Promotion of business	250,844.28	249,070.05	255,956.03
Billing and collecting	695,729.42	745,159.02	792,983.99
General office, salaries and expenses	904,025.64	907,226.89	923,676.84
Undistributed expense	502,206.06	523,862.96	520,893.10
Truck operation and maintenance	110,630.62	112,029.82	107,918.93
Interest	2,152,695.49	2,220,214.45	2,328,094.32
Sinking fund and principal payments on debentures	1,687,201.64	1,828,061.62	2,061,718.79
Total expenses	25,335,461.74	26,766,134.00	27,991,980.01
Surplus	3,871,222.79	3,475,686.19	2,922,232.91
Depreciation and other reserves	1,469,846.83	1,574,991.68	1,775,330.69
Surplus less depreciation	2,401,375.96	1,900,694.51	1,146,902.22

OPERATING REPORT—Concluded

1932	1933	1934	1935	1936
280	282	282	284	283
$ c.	$ c.	$ c.	$ c.	$ c.
11,447,307.85	11,429,101.13	11,844,033.10	12,145,219.89	12,682,140.18
6,243,794.01	6,013,025.96	6,206,086.35	6,458,748.57	6,815,439.16
9,356,693.88	9,080,522.07	9,692,784.37	10,211,968.71	10,694,192.44
1,859,585.35	1,826,872.07	1,875,969.80	1,821,285.82	1,817,986.94
1,783,972.46	1,779,582.48	1,777,596.69	1,788,760.38	1,799,420.87
11,069.27*	12,812.74*	18,747.73*	21,669.98*	23,158.76*
513,787.30	485,925.43	555,172.04	562,285.82	575,825.49
31,216,210.12	30,627,841.88	31,970,390.08	33,009,939.17	34,408,163.84
19,109,036.25	19,330,861.58	19,591,887.79	20,053,676.40	20,486,582.65
503,351.82	484,764.57	468,944.09	478,813.83	478,855.71
300,186.15	288,583.29	296,550.52	297,127.27	301,897.24
969,750.51	895,350.99	844,813.95	830,633.88	855,576.02
95,485.55	82,321.32	75,172.18	70,749.63	72,711.67
300,104.85	283,115.98	291,402.79	313,234.11	328,410.90
368,208.73	361,499.20	352,499.09	340,761.52	306,644.80
360,709.76	353,082.15	338,784.80	340,120.36	356,932.01
266,760.84	259,936.42	228,741.36	252,648.33	288,338.93
818,721.33	817,660.03	827,860.20	835,375.90	945,892.70
960,558.88	908,517.79	908,039.75	943,880.18	967,269.06
436,692.96	349,101.36	362,322.12	360,676.96	448,332.98
112,059.90	105,452.68	98,081.61	95,150.54	69,805.06
2,532,940.93	2,426,286.35	2,204,994.25	2,040,130.35	1,893,304.28
2,244,367.86	2,319,319.09	2,358,169.12	2,423,088.34	2,448,223.80
29,378,936.42	29,265,852.80	29,248,263.62	29,686,067.60	30,248,777.81
1,837,273.70	1,361,989.08	2,722,126.46	3,323,871.57	4,159,386.03
1,920,896.22	1,989,000.41	2,036,637.33	2,076,322.24	2,230,021.86
83,622.52 (loss)	627,011.33 (loss)	685,489.13	1,247,549.33	1,929,364.17

*Profits from the sale of merchandise. Rural service now given in "Rural Power Districts." Consult Section IX.

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM

Municipality	Acton	Agincourt	Ailsa Craig	Alvinston	Amherstburg
Population	1,957	P.V.	452	607	2,670
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	1,545.45			133.56	
Substation equipment	1,847.39				932.00
Distribution system—overhead	23,921.94	8,559.03	7,571.03	14,001.62	34,541.35
Distribution system—underground					
Line transformers	11,387.85	3,867.68	1,761.29	2,980.49	15,952.89
Meters	10,747.96	2,634.70	2,443.67	2,972.37	16,063.80
Street light equipment, regular	1,889.60	874.51	412.24	1,090.62	812.44
Street light equipment, ornamental					5,598.72
Miscellaneous construction expense	2,995.73	69.90	492.36	810.74	1,559.66
Steam or hydraulic plant					
Old plant				773.85	
Total plant	54,335.92	16,005.82	12,680.59	22,763.25	75,460.86
Bank and cash balance	5,604.01	3,362.84	7,706.66	1,296.38	9,468.33
Securities and investments	4,500.00	3,000.00	3,000.00	7,500.00	
Accounts receivable	2,123.98	897.25	400.30	494.92	5,019.13
Inventories	977.88				
Sinking fund on local debentures					
Equity in H-E.P.C. systems	50,320.80	7,690.58	12,033.18	11,845.69	38,344.90
Other assets	214.69				2,874.79
Total assets	118,077.28	30,956.49	35,820.73	43,900.24	131,168.01
Deficit					
Total	118,077.28	30,956.49	35,820.73	43,900.24	131,168.01
LIABILITIES					
Debenture balance		1,503.80		8,946.44	17,186.79
Accounts payable			97.37		35.18
Bank overdraft					
Other liabilities	735.21		161.00	52.85	7,207.69
Total liabilities	735.21	1,503.80	258.37	8,999.29	24,429.66
RESERVES					
For equity in H-E.P.C. systems	50,320.80	7,690.58	12,033.18	11,845.69	38,344.90
For depreciation	10,299.25	2,579.78	5,841.77	6,579.14	19,699.77
Other reserves				75.00	329.33
Total reserves	60,620.05	10,270.36	17,874.95	18,499.83	58,374.00
SURPLUS					
Debentures paid	14,500.00	6,568.85	6,883.38	14,582.80	14,866.81
Local sinking fund					
Operating surplus	42,222.02	12,613.48	10,804.03	1,818.32	33,497.54
Total surplus	56,722.02	19,182.33	17,687.41	16,401.12	48,364.35
Total liabilities, reserves and surplus	118,077.28	30,956.49	35,820.73	43,900.24	131,168.01
Percentage of net debt to total assets	1.1	6.5	1.1	28.0	21.6

NOTE.—In computing the "percentage of net debt to total assets," the ornamental street lighting capital, sinking fund on local debentures, and equity in H-E.P.C. systems, are excluded from assets; and the total liabilities are reduced by the amount of the local sinking fund reserve, "A"

Hydro Municipalities as at December 31, 1936

Ancaster Twp.	Arkona 408	Aylmer 1,992	Ayr 763	Baden P.V.	Beachville P.V.	Belle River 705	Blenheim 1,740
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		9,019.23	125.00	660.64	176.13		
							909.64
16,114.42	9,572.99	20,977.11	12,522.37	8,658.62	14,106.51	17,290.92	27,381.49
10,742.40	1,706.44	10,927.47	4,154.96	5,632.00	3,550.21	4,299.15	8,871.19
4,412.99	1,584.70	10,412.00	3,709.59	3,191.77	3,370.72	3,751.10	9,367.94
1,372.59	720.25	1,821.81	610.17	447.45	444.23	924.29	3,368.26
							1,482.97
394.30	215.36	1,122.18	941.79		602.04	1,055.71	866.05
	1,030.30	6,719.17	4,002.53				
33,036.70	14,830.04	60,998.97	26,066.41	18,590.48	22,249.84	27,321.17	52,247.54
	140.64	5,040.11	757.45	1,804.27	1,934.53	1,604.49	9,631.03
		12,000.00			4,000.00		
1,774.42	54.95	2,525.06	1,017.47	1,197.00	728.82	1,405.65	1,410.22
							624.99
11,851.32	4,374.33	30,941.86	11,002.73	24,666.59	31,021.46	7,341.45	28,090.57
			517.29				
46,662.44	19,399.96	111,506.00	39,361.35	46,258.34	59,934.65	37,672.76	92,004.35
	1,578.58						
46,662.44	20,978.54	111,506.00	39,361.35	46,258.34	59,934.65	37,672.76	92,004.35
6,939.14	7,853.69	15,926.16	5,791.20	1,408.20	1,547.36		6,918.08
1,189.36	1,182.60	77.40	6.51		66.82		144.57
460.00							
212.42	14.17	141.00				79.00	1,656.47
8,800.92	9,050.46	16,144.56	5,797.71	1,408.20	1,614.18	79.00	8,719.12
11,851.32	4,374.33	30,941.86	11,002.73	24,666.59	31,021.46	7,341.45	28,090.57
7,889.90	2,294.61	13,504.49	5,273.83	2,503.12	6,640.46	6,736.35	14,055.54
		665.91				5,000.00	104.98
19,741.22	6,668.94	45,112.26	16,276.56	27,169.71	37,661.92	19,077.80	42,251.09
3,850.44	5,259.14	22,775.76	11,712.18	3,591.80	3,805.64	8,500.00	7,081.92
14,269.86		27,473.42	5,574.90	14,088.63	16,852.91	10,015.96	33,952.22
18,120.30	5,259.14	50,249.18	17,287.08	17,680.43	20,658.55	18,515.96	41,034.14
46,662.44	20,978.54	111,506.00	39,361.35	46,258.34	59,934.65	37,672.76	92,004.35
25.2	60.2	20.0	20.4	6.5	5.6	0.3	11.6

and the liability in respect to the ornamental street lighting capital, which amount is included in other liabilities.

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Blyth	Bolton	Bothwell	Brampton	Brantford
Population	632	559	697	5,447	31,212
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings				5,355.12	99,118.72
Substation equipment				30,779.44	166,185.23
Distribution system—overhead	11,466.08	9,970.72	6,197.53	50,722.13	236,275.04
Distribution system—underground					
Line transformers	2,449.70	4,688.27	2,492.37	31,434.50	127,389.30
Meters	2,069.34	3,080.82	2,909.24	27,995.21	127,649.95
Street light equipment, regular	1,569.43	856.19	209.51	2,679.07	24,202.17
Street light equipment, ornamental			4,431.19		38,922.18
Miscellaneous construction expense	271.95	1,050.06	504.62	18,229.02	32,090.31
Steam or hydraulic plant					
Old plant	2,332.68	1,554.60			7,257.00
Plant not distributed					200,000.00
Total plant	20,159.18	21,200.66	16,744.46	167,194.49	1,059,089.90
Bank and cash balance	2,786.42	2,188.92	4,204.43	5,077.84	26,575.46
Securities and investments		1,500.00	11,000.00	4,313.40	
Accounts receivable	1,008.48	799.02	245.23	5,213.01	32,835.11
Inventories			27.50	153.59	9,631.65
Sinking fund on local debentures					
Equity in H-E.P.C. systems	6,998.60	13,561.57	13,809.61	125,532.18	657,947.36
Other assets					16,567.97
Total assets	30,952.68	39,250.17	46,031.23	307,484.51	1,802,647.45
Deficit					
Total	30,952.68	39,250.17	46,031.23	307,484.51	1,802,647.45
LIABILITIES					
Debenture balance	5,714.13	4,232.81	2,470.68	6,818.89	115,750.00
Accounts payable	189.58		67.20	5,987.30	30,560.76
Bank overdraft					
Other liabilities	155.00		1,196.22		54,067.97
Total liabilities	6,058.71	4,232.81	3,734.10	12,806.19	200,378.73
RESERVES					
For equity in H-E.P.C. systems	6,998.60	13,561.57	13,809.61	125,532.18	657,947.36
For depreciation	3,930.62	6,568.43	7,010.84	51,554.54	249,935.91
Other reserves			25.02	207.89	209,425.97
Total reserves	10,929.22	20,130.00	20,845.47	177,294.61	1,117,309.24
SURPLUS					
Debentures paid	10,554.90	8,267.19	3,063.51	62,231.75	414,250.00
Local sinking fund					
Operating surplus	3,409.85	6,620.17	18,388.15	55,151.96	70,709.48
Total surplus	13,964.75	14,887.36	21,451.66	117,383.71	484,959.48
Total liabilities, reserves and surplus	30,952.68	39,250.17	46,031.23	307,484.51	1,802,647.45
Percentage of net debt to total assets	25.3	16.5	9.4	7.0	14.7

"A"—Continued

Hydro Municipalities as at December 31, 1936

Brantford Twp.	Bridgeport P.V.	Brigden P.V.	Brussels 775	Burford P.V.	Burgessville P.V.	Caledonia 1,351	Campbellville P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		101.03		202.00			
1,192.71							
57,357.25	9,809.80	7,218.75	13,651.07	9,277.77	3,518.20	17,987.95	2,973.19
17,077.14	3,979.30	2,060.02	2,402.70	3,008.01	1,203.50	6,432.74	718.23
12,792.22	2,263.94	2,238.85	3,949.86	3,493.95	996.24	6,697.60	602.20
4,716.64	1,602.69	464.90	1,587.79	425.14	261.02	1,582.94	335.61
2,847.28	634.91	924.87	1,572.29	697.58	457.22	897.74	45.82
		1,381.00	2,827.50				
95,983.24	18,290.64	14,389.42	25,991.21	17,104.45	6,436.18	33,598.97	4,675.05
2,134.40	86.19	1,876.17	8,267.24	2,582.53	96.37	1,223.08	769.54
				4,000.00		2,000.00	1,000.00
1,215.89	637.30	352.04	830.99	578.48	219.83	855.22	437.36
4,300.53							
23,249.51	4,181.21	9,143.51	9,575.61	10,201.99	4,092.80	16,660.73	1,756.89
1,748.17	132.91						
128,631.74	23,328.25	25,761.14	44,665.05	34,467.45	10,845.18	54,338.00	8,638.84
128,631.74	23,328.25	25,761.14	44,665.05	34,467.45	10,845.18	54,338.00	8,638.84
12,723.10	9,997.92		9,986.35			968.92	2,725.50
408.84	221.99		1,807.99		174.06		
1,748.17	132.91	10.00		45.08		5.00	
14,880.11	10,352.82	10.00	11,794.34	45.08	174.06	973.92	2,725.50
23,249.51	4,181.21	9,143.51	9,575.61	10,201.99	4,092.80	16,660.73	1,756.89
23,407.18	5,996.62	4,139.90	5,824.35	5,225.74	2,670.09	2,469.56	1,046.54
91.61		78.89			85.41		
46,748.30	10,177.83	13,362.30	15,399.96	15,427.73	6,848.30	19,130.29	2,803.43
44,402.56	2,370.11	8,000.00	11,013.65	9,000.00	3,500.00	3,655.08	2,722.27
4,300.53							
18,300.24	427.49	4,388.84	6,457.10	9,994.64	322.82	30,578.71	387.64
67,003.33	2,797.60	12,388.84	17,470.75	18,994.64	3,822.82	34,233.79	3,109.91
128,631.74	23,328.25	25,761.14	44,665.05	34,467.45	10,845.18	54,338.00	8,638.84
10.5	54.0	0.6	33.6	0.2	2.6	2.5	39.6

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Cayuga	Chatham	Chippawa	Clifford	Clinton
Population	700	15,957	1,195	423	1,873
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings		46,616.76	631.50		8,760.82
Substation equipment		113,072.81			7,598.09
Distribution system—overhead	14,969.29	164,176.35	19,738.42	7,727.14	23,591.16
Distribution system—underground		82,861.60			
Line transformers	3,280.79	84,751.28	6,107.56	1,077.29	9,038.73
Meters	3,068.86	70,356.61	5,187.47	2,320.95	9,949.48
Street light equipment, regular	951.86	18,843.16	1,898.61	716.85	1,347.48
Street light equipment, ornamental		35,426.10			
Miscellaneous construction expense	459.87	32,123.33	1,070.52	37.44	3,601.74
Steam or hydraulic plant					
Old plant		42,752.31			10,658.09
Total plant	22,730.67	690,980.31	34,634.08	11,879.67	74,545.59
Bank and cash balance	1,218.48	23,988.68	2,634.32	790.88	5,279.41
Securities and investments	1,500.00				3,000.00
Accounts receivable	814.61	37,465.51	285.95	510.57	2,373.85
Inventories	340.27	5,684.31		21.40	2,995.29
Sinking fund on local debentures					36,238.52
Equity in H-E.P.C. systems	6,787.06	293,727.90	12,894.01	4,910.54	35,039.76
Other assets		15,689.46			
Total assets	33,391.09	1,067,536.17	50,448.36	18,113.06	159,472.42
Deficit					
Total	33,391.09	1,067,536.17	50,448.36	18,113.06	159,472.42
LIABILITIES					
Debenture balance	10,601.45	195,191.85	3,874.99	6,190.32	40,500.00
Accounts payable	117.00	13,644.13			13.73
Bank overdraft					
Other liabilities	90.00	41,052.26	242.00		343.81
Total liabilities	10,808.45	249,888.24	4,116.99	6,190.32	40,857.54
RESERVES					
For equity in H-E.P.C. systems	6,787.06	293,727.90	12,894.01	4,910.54	35,039.76
For depreciation	4,479.06	152,517.17	7,674.94	2,151.83	25,098.88
Other reserves		21,397.90			611.25
Total reserves	11,266.12	467,642.97	20,568.95	7,062.37	60,749.89
SURPLUS					
Debentures paid	9,398.55	174,808.15	9,475.01	1,809.68	4,000.00
Local sinking fund					36,238.52
Operating surplus	1,917.97	175,196.81	16,287.41	3,050.69	17,626.47
Total surplus	11,316.52	350,004.96	25,762.42	4,860.37	57,864.99
Total liabilities, reserves and surplus	33,391.09	1,067,536.17	50,448.36	18,113.06	159,472.42
Percentage of net debt to total assets	40.6	29.0	10.9	46.9	5.2

"A"—Continued

Hydro Municipalities as at December 31, 1936

Comber P.V.	Cottam P.V.	Courtright 283	Dashwood P.V.	Delaware P.V.	Dorchester P.V.	Drayton 568	Dresden 1,509
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
							523.00
7,334.60	9,591.84	6,539.99	3,449.28	3,921.97	8,987.89	9,505.63	18,637.05
3,422.04	1,661.26	1,225.40	1,720.44	1,001.44	3,126.91	3,328.48	7,508.37
2,554.23	1,798.79	880.37	1,406.13	1,006.77	2,481.13	3,352.84	6,097.46
384.93	366.43	425.08	353.42	148.08	641.67	772.21	1,127.48
1,047.69	226.43	558.67	291.87	208.73	328.41	416.81	1,577.46
							4,815.01
14,743.49	13,644.75	9,629.51	7,221.14	6,286.99	15,566.01	17,375.97	40,285.83
2,518.13	1,995.03	1,269.33	1,502.82	1,117.49	2,204.40	726.95	1,951.16
3,000.00	3,000.00		1,500.00	3,000.00	2,000.00	5,000.00	2,500.00
406.70	287.12	77.16	860.89	482.04	462.16	593.70	3,168.14
							431.83
14,568.57	2,940.15	4,199.44	6,364.37	2,233.17	5,518.15	9,196.70	23,716.61
62.00							
35,298.89	21,867.05	15,175.44	17,449.22	13,119.69	25,750.72	32,893.32	72,053.57
35,298.89	21,867.05	15,175.44	17,449.22	13,119.69	25,750.72	32,893.32	72,053.57
800.56	5,676.79	1,505.77	1,758.32	1,682.42	1,988.61	5,443.25	
4.25		68.08	168.99	134.36	590.50	14.98	
22.00	190.00		70.00		27.50		178.00
826.81	5,866.79	1,573.85	1,997.31	1,816.78	2,606.61	5,458.23	178.00
14,568.57	2,940.15	4,199.44	6,364.37	2,233.17	5,518.15	9,196.70	23,716.61
5,675.34	3,550.63	1,424.78	2,580.52	1,329.42	2,539.97	6,544.91	5,775.14
				30.00	64 15		267.44
20,243.91	6,490.78	5,624.22	8,944.89	3,592.59	8,122.27	15,741.61	29,759.19
6,899.44	3,323.43	6,632.58	1,641.68	2,317.58	2,311.39	4,056.75	16,238.25
7,328.73	6,186.05	1,344.79	4,865.34	5,392.74	12,710.45	7,636.73	25,878.13
14,228.17	9,509.48	7,977.37	6,507.02	7,710.32	15,021.84	11,693.48	42,116.38
35,298.89	21,867.05	15,175.44	17,449.22	13,119.69	25,750.72	32,893.32	72,053.57
4.0	31.0	14.3	18.0	16.7	12.9	23.0	0.4

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Drumbo	Dublin	Dundas	Dunnville	Dutton
Population	P.V.	P.V.	5,062	3,938	810
Assets	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings			12,111.11	3,356.09	
Substation equipment			13,396.22	27,507.57	
Distribution system—overhead	4,613.36	5,787.61	50,394.00	38,189.29	9,094.18
Distribution system—underground					
Line transformers	1,651.50	897.65	19,634.79	18,561.65	3,425.25
Meters	1,863.92	874.11	20,067.60	17,211.93	3,376.79
Street light equipment, regular	262.27	544.86	10,834.15	8,012.37	659.31
Street light equipment, ornamental			1,154.52		
Miscellaneous construction expense	235.58	787.06	6,424.70	5,412.66	311.10
Steam or hydraulic plant					
Old plant			1,867.38	10,717.62	
Total plant	8,626.63	8,891.29	135,884.47	128,969.18	16,866.63
Bank and cash balance	5,177.79	472.33	17,897.67	7,398.33	1,068.18
Securities and investments			1,500.00	10,000.00	4,000.00
Accounts receivable	202.27	401.68	6,407.18	5,136.86	690.43
Inventories			329.30	1,397.97	9.10
Sinking fund on local debentures					
Equity in H-E.P.C. systems	4,852.82	4,389.78	105,958.57	44,784.59	14,814.53
Other assets			4,744.81		75.11
Total assets	18,859.51	14,155.08	272,722.00	197,686.93	37,523.98
Deficit		1,010.07			
Total	18,859.51	15,165.15	272,722.00	197,686.93	37,523.98
Liabilities					
Debenture balance	1,891.97		18,924.75	41,564.87	
Accounts payable	105.65	692.51	170.35	2,803.51	56
Bank overdraft					
Other liabilities			5,695.34	1,595.00	117.36
Total liabilities	1,997.62	692.51	24,790.44	45,963.38	117.92
Reserves					
For equity in H-E.P.C. systems	4,852.82	4,389.78	105,958.57	44,784.59	14,814.53
For depreciation	3,800.76	3,882.86	52,574.75	32,572.31	7,387.56
Other reserves			2,395.14		43.20
Total reserves	8,653.58	8,272.64	160,928.46	77,356.90	22,245.29
Surplus					
Debentures paid	2,608.03	6,200.00	34,075.25	33,935.13	8,407.49
Local sinking fund					
Operating surplus	5,600.28		52,927.85	40,431.52	6,753.28
Total surplus	8,208.31	6,200.00	87,003.10	74,366.65	15,160.77
Total liabilities, reserves and surplus	18,859.51	15,165.15	272,722.00	197,686.93	37,523.98
Percentage of net debt to total assets	14.3	7.1	14.2	30.6	0.5

"A"—Continued

Hydro Municipalities as at December 31, 1936

East York Twp.	Elmira 2,352	Elora 1,143	Embro 434	Erieau 286	Erie Beach 26	Essex 1,748	Etobicoke Twp.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
17,018.18	7,421.01	1,524.54					27,175.69
8,893.55							
293,657.01	34,914.87	17,366.50	10,202.41	10,082.52	2,048.16	36,700.78	281,282.58
						442.55	
82,224.48	15,439.13	7,704.49	3,039.64	1,861.67	613.17	16,065.63	75,560.67
143,491.66	12,493.25	5,958.60	2,075.18	2,535.54	689.12	11,348.57	58,454.33
21,216.27	1,377.20	1,245.99	535.73	298.65		1,548.10	12,406.04
						7,205.06	2,689.44
12,338.18	3,521.24	1,110.59	69.45	379.90	375.03	1,758.95	5,867.09
	2,168.08	1,425.47	429.25				
578,839.33	77,334.78	36,336.18	16,351.66	15,158.28	3,725.48	75,069.64	463,435.84
18,302.54	3,657.19	564.29	2,671.63	1,404.54	1,403.39	4,728.62	5,456.67
2,812.91		7,000.00	1,000.00			10,000.00	
16,458.32	2,802.12	1,159.39	686.16	561.22	135.97	2,092.03	9,537.68
6,656.91		580.52					6,127.92
182,204.73	59,958.23	28,736.50	8,574.82	4,406.97	1,085.78	21,999.33	139,790.30
		36.49				664.63	
805,274.74	143,752.32	74,413.37	29,284.27	21,531.01	6,350.62	114,554.25	624,348.41
805,274.74	143,752.32	74,413.37	29,284.27	21,531.01	6,350.62	114,554.25	624,348.41
213,552.33	19,321.10	1,319.29	1,747.92	3,443.54	2,117.77	17,410.28	146,901.83
36,516.19	13.25	1,264.71	361.18	43.53		4.20	20,187.00
16,343.68	729.39	32.25		35.00	5.00	7,869.69	8,752.02
266,412.20	20,063.74	2,616.25	2,109.10	3,522.07	2,122.77	25,284.17	175,840.85
182,204.73	59,958.23	28,736.50	8,574.82	4,406.97	1,085.78	21,999.33	139,790.30
77,457.57	20,576.53	13,294.38	5,842.31	2,670.32	489.31	16,010.11	88,419.98
5,508.12			50.00	47.21		444.22	602.69
265,170.42	80,534.76	42,030.88	14,467.13	7,124.50	1,575.09	38,453.66	228,812.97
143,515.45	17,847.40	11,680.71	5,752.08	3,439.59	1,182.23	5,089.72	118,793.57
130,176.67	25,306.42	18,085.53	6,955.96	7,444.85	1,470.53	45,726.70	100,901.02
273,692.12	43,153.82	29,766.24	12,708.04	10,884.44	2,652.76	50,816.42	219,694.59
805,274.74	143,752.32	74,413.37	29,284.27	21,531.01	6,350.62	114,554.25	624,348.41
42.8	23.9	5.7	10.2	20.6	40.3	21.2	35.9

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Exeter	Fergus	Fonthill	Forest
Population	1,658	2,623	800	1,475
ASSETS	$ c.	$ c.	$ c.	$ c.
Lands and buildings	3,320.81			6,447.40
Substation equipment				
Distribution system—overhead	29,753.92	34,738.72	11,174.61	20,457.40
Distribution system—underground				
Line transformers	11,484.35	19,482.45	5,058.63	9,851.96
Meters	8,147.02	12,958.53	4,419.34	9,833.82
Street light equipment, regular	4,722.46	2,529.59	1,074.40	2,369.94
Street light equipment, ornamental				
Miscellaneous construction expense	1,977.72	1,258.95	3,773.65	879.39
Steam or hydraulic plant				
Old plant		2,546.59		11,042.87
Total plant	59,406.28	73,514.83	25,500.63	60,882.78
Bank and cash balance	2,286.80	1,708.27	2,811.52	2,421.31
Securities and investments	11,000.00			14,500.00
Accounts receivable	3,126.91	5,179.99	243.25	2,974.60
Inventories	1,529.10	66.99		1,869.45
Sinking fund on local debentures				
Equity in H-E.P.C. systems	31,076.74	42,238.92	4,315.31	23,402.39
Other assets		92.31		
Total assets	108,425.83	122,801.31	32,870.71	106,050.53
Deficit				
Total	108,425.83	122,801.31	32,870.71	106,050.53
LIABILITIES				
Debenture balance	5,031.89	14,971.95	13,496.57	7,820.36
Accounts payable		3,607.37	2,343.68	
Bank overdraft				
Other liabilities	224.50	25.00	370.62	43.06
Total liabilities	5,256.39	18,604.32	16,210.87	7,863.42
RESERVES				
For equity in H-E.P.C. systems	31,076.74	42,238.92	4,315.31	23,402.39
For depreciation	12,679.68	10,483.91	2,129.35	15,192.26
Other reserves	543.84	350.00		43.20
Total reserves	44,300.26	53,072.83	6,444.66	38,637.85
SURPLUS				
Debentures paid	14,968.16	27,028.05	9,003.43	26,579.64
Local sinking fund				
Operating surplus	43,901.02	24,096.11	1,211.75	32,969.62
Total surplus	58,869.18	51,124.16	10,215.18	59,549.26
Total liabilities, reserves and surplus	108,425.83	122,801.31	32,870.71	106,050.53
Percentage of net debt to total assets	6.8	23.1	56.8	9.5

"A"—Continued

Hydro Municipalities as at December 31, 1936

Galt 13,958	George-town 2,283	Glencoe 903	Goderich 4,344	Granton P.V.	Guelph 21,173	Hagers-ville 1,374	Hamilton 154,020
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
201,705.30	595.91	3,220.35	13,569.89	....	13,380.18	....	929,410.58
113,516.86	....	....	34,402.48	....	161,987.22	864.37	1,756,548.27
239,142.77	32,465.39	20 865.81	68,030.06	4,341.93	223,355.34	20,595.58	1,205,175.16
....	....	....	....	....	....	....	839,963.81
116,551.31	18,408.21	6,325.45	18,589.64	1,533.55	93,371.38	10,394.92	877,750.08
70,632.07	14,202.91	4,202.13	19,617.23	1,500.40	98,491.84	8,765.09	677,279.18
71,813.90	4,328.70	1,735.09	4,874.97	180.78	42,760.72	1,040.67	280,078.42
....	....	....	....	....	....	....	....
24,279.51	2,801.78	3,340.03	5,407.55	113.08	16,097.48	714.86	203,140.38
....	....	....	....	....	....	....	....
....	2,209.80	....	14,622.15	....	....	....	30,190.00
837,641.72	75,012.70	39,688.86	179,113.97	7,669.74	649,444.16	42,375.49	6,799,535.68
2.966.09	4,036.42	4,161.40	16,056.77	3,538.78	6,536.44	6,655.54	157,154.12
43,000.00	7,213.69	....	7,000.00	2,000.00	....	12,000.00	....
45,329.26	4,008.11	2,064.53	4 742.18	568.75	34,009.92	766.40	364,487.43
17,566.02	....	41.24	1,034.29	....	22,207.83	....	148,788.46
80,420.04	....	....	....	....	4,278.58	....	402,826.28
407,901.76	75,101.65	14,872.85	92,644.14	6,229.81	493,267.71	59,672.21	3,243,420.95
1,855.95	....	....	2,063.36	....	....	222.09	4,913.79
1,436.680.84	165,372.57	60,828.88	302,654.71	20,007.08	1,209,744.64	121,691.73	11,121,126.71
....	....	....	....	....	....	....	....
1,436,680.84	165,372.57	60,828.88	302,654.71	20.007.08	1,209,744.64	121,691.73	11.121,126.71
210,466.96	8,111.05	5,279.54	42,654.05	1,729.75	5,000.00	2,258.47	2,469,560.20
20,665.62	....	22.00	46.92	465.07	21,971.96	87.20	181,249.25
1,117.72	769.56	56.89	2,063.36	....	2,570.13	220.00	*1,148,459.87
232,250.30	8,880.61	5,358.43	44,764.33	2,194.82	29,542.09	2,565.67	3,799,269.32
407,901.76	75,101.65	14,872.85	92,644.14	6,229.81	493,267.71	59,672.21	3,243,420.95
263,574.37	21,873.36	9,661.56	70,898.19	2,827.61	142,858.62	10,053.10	1,088,047.98
31,214.92	....	225.00	981.35	....	2,537.88	....	335,800.72
702,691.05	96,975.01	24,759.41	164,523.68	9,057.42	638,664.21	69,725.31	4,667,269.65
307,534.99	11,888.95	14,833.34	53,434.00	1,770.25	139,999.99	5,741.53	1,749,464.92
80,420.04	....	....	....	....	4,278.58	....	402,826.28
113,784.46	47,628.00	15,877.70	39,932.70	6,984.59	397,259.77	43,659.22	502,296.54
501,739.49	59,516.95	30,711.04	93,366.70	8,754.84	541,538.34	49,400.75	2,654,587.74
1,436,680.84	165,372.57	60,828.88	302,654.71	20,007.08	1,209,744.64	121,691.73	11,121,126.71
16.0	9.8	11.6	21.3	15.9	3.5	4.1	45.4

*Includes a balance of $1,100,000.00 on purchase agreement.

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA
SYSTEM—Continued

Municipality	Harriston	Harrow	Hensall	Hespeler	Highgate
Population	1,325	933	702	2,877	334
	$ c.	$ c.	$ c.	$ c.	$ c.
Assets					
Lands and buildings	395.25			4,573.03	
Substation equipment	600.00			27,959.26	
Distribution system—overhead	22,267.49	17,499.01	12,378.67	30,662.60	6,383.76
Distribution system—underground					
Line transformers	7,494.84	10,078.81	4,428.42	21,480.00	2,109.25
Meters	7,678.76	6,072.30	3,463.70	12,560.28	1,750.29
Street light equipment, regular	1,268.98	852.85	612.83	7,285.90	453.91
Street light equipment, ornamental					
Miscellaneous construction expense	866.64	224.66	530.77	1,119.28	497.11
Steam or hydraulic plant					
Old plant	1,001.43		400.00		
Total plant	41,573.39	34,727.63	21,814.39	105,640.35	11,194.32
Bank and cash balance	4,094.01	1,782.17	1,612.67	19,079.33	1,381.71
Securities and investments			7,000.00		3,000.00
Accounts receivable	1,198.34	1,867.04	786.67	3,713.96	253.82
Inventories	94.00	396.14		308.15	
Sinking fund on local debentures					
Equity in H-E.P.C. systems	25,255.76	16,778.70	11,931.42	81,096.90	7,537.80
Other assets					
Total assets	72,215.50	55,551.68	43,145.15	209,838.69	23,367.65
Deficit					
Total	72,215.50	55,551.68	43,145.15	209,838.69	23,367.65
Liabilities					
Debenture balance	8,084.68	3,700.43	5,652.62	28,938.41	
Accounts payable	24.22	193.64	688.05	291.64	
Bank overdraft					
Other liabilities		419.26	60.25	5.00	50.00
Total liabilities	8,108.90	4,313.33	6,400.92	29,235.05	50.00
Reserves					
For equity in H-E.P.C. systems	25,255.76	16,778.70	11,931.42	81,096.90	7,537.80
For depreciation	8,432.37	4,226.91	7,852.73	15,674.36	4,417.64
Other reserves		88.21		261.04	
Total reserves	33,688.13	21,093.82	19,784.15	97,032.30	11,955.44
Surplus					
Debentures paid	17,733.35	8,299.57	6,347.38	48,632.10	5,000.00
Local sinking fund					
Operating surplus	12,685.12	21,844.96	10,612.70	34,939.24	6,362.21
Total surplus	30,418.47	30,144.53	16,960.08	83,571.34	11,362.21
Total liabilities, reserves and surplus	72,215.50	55,551.68	43,145.15	209,838.69	23,367.65
Percentage of net debt to total assets	17.3	11.1	20.5	22.7	0.3

"A"—Continued

Hydro Municipalities as at December 31, 1936

Humberstone 2,532	Ingersoll 5,158	Jarvis 495	Kingsville 2,125	Kitchener 31,933	Lambeth P.V.	La Salle 687	Leamington 5,020
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	15,064.45		7,774.09	180,500.60			16,964.65
	33,283.83			223,638.03			7,085.62
26,149.88	55,595.95	9,702.63	32,275.13	333,984.22	7,090.98	19,656.63	51,643.12
				43,769.80			11,991.15
9,181.25	29,278.19	3,151.56	13,644.91	180,956.18	1,883.12	6,716.60	23,427.25
8,203.75	25,295.75	2,636.08	13,960.88	191,769.17	2,428.57	4,104.92	23,824.68
884.80	4,172.22	876.29	1,439.82	68,067.50	1,052.75	946.49	1,380.13
	4,597.59		19,200.00	115,682.08			15,178.49
3,426.82	10,109.33	671.37	827.97	20,296.08	300.71	1,510.69	1,827.33
	19,098.54			52,363.91			
47,846.50	196,495.85	17,037.93	89,122.80	1,411,027.57	12,756.13	32,935.33	153,322.42
7,801.46	4,313.45	1,229.02	9,115.27	14,058.73	599.49	7,563.30	16,912.32
	11,716.57	4,000.00	8,000.00	15,000.00	2,000.00		23,813.81
914.81	3,350.82	229.47	1,699.74	65,693.50	140.20	1,200.09	3,760.73
	1,471.24			11,315.16			
	79,253.20						
14,378.00	138,385.49	10,877.57	29,224.91	948,070.39	7,189.16	9,923.59	57,514.42
			2,175.00			517.57	
70,940.77	434,986.62	33,373.99	139,337.72	2,465,165.35	22,684.98	52,139.88	255,323.70
70,940.77	434,986.62	33,373.99	139,337.72	2,465,165.35	22,684.98	52,139.88	255,323.70
15,000.00	79,800.00	4,993.26	26,351.57	141,767.04		9,191.54	25,987.11
	5,292.21			36,942.32	626.24		5.00
1,161.44	5,974.97	40.00	21,391.00	121,080.70	63.00	513.65	18,055.05
16,161.44	91,067.18	5,033.26	47,742.57	299,790.06	689.24	9,705.19	44,047.16
14,378.00	138,385.49	10,877.57	29,224.91	948,070.39	7,189.16	9,923.59	57,514.42
4,381.45	23,544.79	3,339.99	20,207.61	308,269.54	3,695.07	7,630.29	29,011.52
	768.25		898.24	28,321.14	45.24	217.90	708.24
18,759.45	162,698.53	14,217.56	50,330.76	1,284,661.07	10,929.47	17,771.78	87,234.18
17,000.00		5,506.74	7,148.43	370,382.96	4,000.00	6,308.46	22,012.89
	79,253.20						
19,019.88	101,967.71	8,616.43	34,115.96	510,331.26	7,066.27	18,354.45	102,029.47
36,019.88	181,220.91	14,123.17	41,264.39	880,714.22	11,066.27	24,662.91	124,042.36
70,940.77	434,986.62	33,373.99	139,337.72	2,465,165.35	22,684.98	52,139.88	255,323.70
28.5	3.4	22.4	31.4	13.1	4.4	22.9	15.8

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality Population	Listowel 2,798	London 75,484	London Twp.	Long Branch 3,746	Lucan 643
Assets	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	1,459.49	453,519.23			
Substation equipment		1,002,357.65			
Distribution system—overhead	41,378.00	794,446.11	18,747.68	52,957.72	10,771.99
Distribution system—underground	3,007.91	313,153.08			
Line transformers	18,975.89	312,394.74	6,303.46	12,361.99	4,131.49
Meters	16,543.17	351,996.47	4,610.89	17,574.79	3,326.73
Street light equipment, regular	2,043.87	69,391.50	929.08	4,466.31	430.15
Street light equipment, ornamental	1,348.66	92,286.12			
Miscellaneous construction expense	2,274.09	91,284.70	506.87	1,220.51	577.12
Steam or hydraulic plant					
Old plant	4,745.30		1,733.80		2,860.45
Total plant	91,776.38	3,480,829.60	32,831.78	88,581.32	22,097.93
Bank and cash balance	2,410.47	69,566.85	723.13	1,455.65	4,272.84
Securities and investments	7,000.00		2,000.00		5,000.00
Accounts receivable	2,811.92	275,773.83	2,838.54	1,380.55	450.38
Inventories	51.74	105,857.20			
Sinking fund on local debentures		399,408.83			
Equity in H-E.P.C. systems	56,029.22	1,719,351.43	12,954.66	14,102.27	14,191.66
Other assets	232.28	671.28	301.25		
Total assets	160,312.01	6,051,459.02	51,649.36	105,519.79	46,012.81
Deficit					
Total	160,312.01	6,051,459.02	51,649.36	105,519.79	46,012.81
Liabilities					
Debenture balance	3,047.92	736,501.29	6,238.10	18,652.28	3,467.73
Accounts payable	20.42	83,200.64	29.96	860.95	
Bank overdraft					
Other liabilities	1,580.94	94,593.55	301.25	2,955.65	200.22
Total liabilities	4,649.28	914,295.48	6,569.31	22,468.88	3,667.95
Reserves					
For equity in H-E.P.C. systems	56,029.22	1,719,351.43	12,954.66	14,102.27	14,191.66
For depreciation	34,435.07	1,087,134.12	6,577.81	18,310.01	9,094.64
Other reserves		109,661.97	36.87	233.52	
Total reserves	90,464.29	2,916,147.52	19,569.34	32,645.80	23,286.30
Surplus					
Debentures paid	40,141.97	845,398.71	12,761.90	21,652.32	7,745.89
Local sinking fund		399,408.83			
Operating surplus	25,056.47	976,208.48	12,748.81	28,752.79	11,312.67
Total surplus	65,198.44	2,221,016.02	25,510.71	50,405.11	19,058.56
Total liabilities, reserves and surplus	160,312.01	6,051,459.02	51,649.36	105,519.79	46,012.81
Percentage of net debt to total assets	3.2	11.1	16.9	24.6	11.5

"A"—Continued

Hydro Municipalities as at December 31, 1936

Lynden P.V.	Markham 1,114	Merlin P.V.	Merriton 2,530	Milton 1,739	Milverton 992	Mimico 6,915	Mitchell 1,567
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
241.18			3,507.52		237.20	17,077.41	23,058.94
			43,532.60	16,418.16		38,461.02	19,487.83
4,774.11	16,116.61	8,069.22	34,915.01	20,422.74	12,204.54	76,423.52	29,105.31
2,166.63	8,216.84	3,399.23	8,469.65	14,475.73	7,565.80	33,529.60	8,818.29
1,765.62	5,678.14	2,104.48	10,917.23	13,888.11	5,297.89	28,772.20	12,101.91
354.06	750.76	555.64	4,676.11	1,304.18	737.16	7,801.61	3,723.88
193.57	1,565.03	455.36	2,857.72	4,383.61	594.91	5,470.20	640.75
		241.85		3,092.54			1,500.00
9,495.17	32,327.38	14,825.78	108,875.84	73,985.07	26,637.50	207,535.56	98,436.91
1,629.41	7,187.56	3,167.66	7,291.71	8,899.17	1,281.33	13,299.54	5,371.87
	2,000.00	6,000.00		4,000.00	2,000.00		1,000.00
466.19	877.37	603.34	4,927.60	5,772.31	647.08	6,853.89	8,553.99
				4,225.83			3,823.21
10,511.09	13,121.86	9,233.95	87,114.56	77,740.85	33,917.24	102,841.73	33,031.51
22,101.86	55,514.17	33,830.73	208,209.71	174,623.23	64,483.15	330,530.72	150,217.49
22,101.86	55,514.17	33,830.73	208,209.71	174,623.23	64,483.15	330,530.72	150,217.49
2,150.50		5,481.13	15,038.26	5,972.18		65,572.52	
	918.52	1,251.09		103.14	719.99		630.26
	185.00	75.00		251.35		5,647.81	134.00
2,150.50	1,103.52	6,807.22	15,038.26	6,326.67	719.99	71,220.33	764.26
10,511.09	13,121.86	9,233.95	87,114.56	77,740.85	33,917.24	102,841.73	33,031.51
3,162.69	6,015.25	3,291.25	11,883.01	18,274.45	6,115.78	50,367.19	41,102.86
	55.00	23.40		1,386.93		3,071.73	837.25
13,673.78	19,192.11	12,548.60	98,997.57	97,402.23	40,033.02	156,280.65	74,971.62
2,344.50	11,373.63	7,883.08	17,147.95	27,074.23	9,500.00	61,427.48	22,295.22
3,933.08	23,844.91	6,591.83	77,025.93	43,820.10	14,230.14	41,602.26	52,186.39
6,277.58	35,218.54	14,474.91	94,173.88	70,894.33	23,730.14	103,029.74	74,481.61
22,101.86	55,514.17	33,830.73	208,209.71	174,623.23	64,483.15	330,530.72	150,217.49
18.6	2.6	27.7	12.4	6.5	2.3	31.3	0.7

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality Population	Moore-field P.V.	Mount Brydges P.V.	Newbury 282	New Hamburg 1,456	New Toronto 8,040
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings				2,513.19	43,897.67
Substation equipment				1,217.05	
Distribution system—overhead	2,980.96	6,699.54	6,489.00	23,783.27	81,386.63
Distribution system—underground					8,605.69
Line transformers	1,012.17	1,975.47	1,797.86	6,836.44	32,957.99
Meters	1,221.66	2,577.66	1,295.15	9,048.27	33,031.57
Street light equipment—regular	295.88	710.02	866.47	2,115.04	10,598.12
Street light equipment, ornamental					
Miscellaneous construction expense	348.35	240.44	502.54	752.44	7,018.77
Steam or hydraulic plant					
Old plant			348.22	5,242.56	
Total plant	5,859.02	12,203.13	11,299.24	51,508.26	217,496.44
Bank and cash balance	2,239.69	3,597.24	1,238.90	2,560.79	3,590.93
Securities and investments		3,000.00		4,000.00	
Accounts receivable	322.00	938.03	938.85	1,932.84	16,395.10
Inventories				614.91	
Sinking fund on local debentures					
Equity in H-E.P.C. systems	4,739.91	5,500.28	3,412.89	37,347.12	318,026.70
Other assets		330.48			
Total assets	13,160.62	25,569.16	16,889.88	97,963.92	555,509.17
Deficit					
Total	13,160.62	25,569.16	16,889.88	97,963.92	555,509.17
LIABILITIES					
Debenture balance	363.50	1,839.34	2,900.00	4,152.12	3,011.30
Accounts payable	0.75	192.07	10.00		4,190.50
Bank overdraft					
Other liabilities		330.48	40.00	221.50	6,028.18
Total liabilities	364.25	2,361.89	2,950.00	4,373.62	13,229.98
RESERVES					
For equity in H-E.P.C. systems	4,739.91	5,500.28	3,412.89	37,347.12	318,026.70
For depreciation	2,608.06	3,091.30	3,136.68	13,398.29	47,119.10
Other reserves		100.00		41.74	1,327.73
Total reserves	7,347.97	8,691.58	6,549.57	50,787.15	366,473.53
SURPLUS					
Debentures paid	4,136.50	2,380.66	6,854.39	13,576.96	4,988.70
Local sinking fund					
Operating surplus	1,311.90	12,135.03	535.92	29,226.19	170,816.96
Total surplus	5,448.40	14,515.69	7,390.31	42,803.15	175,805.66
Total liabilities, reserves and surplus	13,160.62	25,569.16	16,889.88	97,963.92	555,509.17
Percentage of net debt to total assets	4.3	11.8	21.9	7.2	5.6

"A"—Continued

Hydro Municipalities as at December 31, 1936

Niagara Falls 18,527	Niagara-on-the-Lake 1,815	North York Twp.	Norwich 1,163	Oil Springs 472	Otterville P.V.	Palmerston 1,410	Paris 4,324
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
132,324.59	2,307.35	28,302.20	4,638.76	1,524.68			8,487.50
228,586.00	16,048.36					691.88	28,126.55
191,650.78	30,229.51	357,064.18	11,113.94	13,145.14	7,330.81	30,190.55	54,848.19
163,325.44	8,283.72	90,627.85	6,455.06	5,234.39	3,510.10	9,895.32	21,044.97
108,081.38	8,455.29	49,581.65	6,987.91	3,421.28	2,511.19	7,553.37	20,059.49
118,808.55	1,262.39	200.68	4,685.64	308.24	1,516.31	6,547.51	14,059.22
		13,491.21					
9,432.95	1,604.87	17,717.59	1,334.50	2,244.09	142.00	978.68	1,240.08
19,796.01			3,509.82			4,018.71	
972,005.70	68,191.49	556,985.36	38,725.63	25,877.82	15,010.41	59,876.02	147,866.00
60,319.58	3,053.28	2,738.89	6,309.75	4,332.37	3,045.02		4,188.60
			1,000.00	2,002.70			28,500.00
10,702.95	5,497.91	8,491.57	3,101.79	870.68	1,746.73	1,473.96	658.02
16,104.73	2,030.73		2,217.52	78.30		3,447.15	
429,074.29	22,585.52	85,933.33	27,730.47	18,964.77	6,299.79	31,911.91	84,488.15
27,032.12		7,279.61	22.50	28.71			
1,515,239.37	101,358.93	661,428.76	79,107.66	52,155.35	26,101.95	96,709.04	265,700.77
1,515,239.37	101,358.93	661,428.76	79,107.66	52,155.35	26,101.95	96,709.04	265,700.77
269,463.54	18,178.29	318,688.38	4,153.64			2,196.79	7,133.20
21,113.05		19,279.21	31.60	871.84	100.35	2,718.36	
						4,422.57	
17,829.97	125.00	20,770.82	232.50	28.71	36.25	327.50	
308,406.56	18,303.29	358,738.41	4,417.74	900.55	136.60	9,665.22	7,133.20
429,074.29	22,585.52	85,933.33	27,730.47	18,964.77	6,299.79	31,911.91	84,488.15
193,387.59	12,814.94	80,708.33	6,736.91	7,924.74	4,809.53	6,091.43	71,223.39
13,753.53	1,113.80		856.19	175.00		458.05	175.00
636,215.41	36,514.26	166,641.66	35,323.57	27,064.51	11,109.32	38,461.39	155,886.54
420,779.46	18,323.13	124,333.49	9,602.36	16,721.31	4,500.00	24,803.21	84,866.80
149,837.94	28,218.25	11,715.20	29,763.99	7,468.98	10,356.03	23,779.22	17,814.23
570,617.40	46,541.38	136,048.69	39,366.35	24,190.29	14,856.03	48,582.43	102,681.03
1,515,239.37	101,358.93	661,428.76	79,107.66	52,155.35	26,101.95	96,709.04	265,700.77
28.4	23.2	61.4	8.6	2.7	0.7	14.9	3.9

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Parkhill	Petrolia	Plattsville	Point Edward	Port Colborne
Population	979	2,705	P.V.	1,290	5,844
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings		900.00			22,561.01
Substation equipment		5,939.98			
Distribution system—overhead	16,039.71	44,482.39	4,257.56	21,390.58	90,306.00
Distribution system—underground					
Line transformers	4,359.83	27,518.66	1,890.66	6,746.18	26,293.31
Meters	4,153.82	15,094.71	1,929.33	5,117.40	22,991.89
Street light equipment, regular	995.06	6,219.32	147.15	3,091.41	4,549.26
Street light equipment, ornamental					16,611.59
Miscellaneous construction expense	1,314.75	5,935.96	535.92	503.14	6,495.64
Steam or hydraulic plant					
Old plant		3,389.94			9,929.60
Total plant	26,863.17	109,480.96	8,760.62	36,848.71	199,738.30
Bank and cash balance	1,212.87	6,784.31	1,403.02		15.00
Securities and investments	1,500.00	8,400.00	2,000.00	13,000.00	1,500.00
Accounts receivable	1,000.47	7,189.12	302.37	4,567.12	19,617.43
Inventories		828.96			4,901.47
Sinking fund on local debentures					
Equity in H-E.P.C. systems	13,774.42	76,102.81	6,683.88	38,973.15	68,062.63
Other assets				245.43	20.00
Total assets	44,350.93	208,786.16	19,149.89	93,634.41	293,854.83
Deficit					
Total	44,350.93	208,786.16	19,149.89	93,634.41	293,854.83
LIABILITIES					
Debenture balance	3,047.20	16,742.18	2,202.10	5,414.17	70,897.34
Accounts payable				107.58	688.56
Bank overdraft				1,462.10	855.63
Other liabilities	108.00	832.50		245.43	20,371.17
Total liabilities	3,155.20	17,574.68	2,202.10	7,229.28	92,812.70
RESERVES					
For equity in H-E.P.C. systems	13,774.42	76,102.81	6,683.88	38,973.15	68,062.63
For depreciation	7,096.22	32,634.53	3,442.88	11,617.95	40,366.71
Other reserves		749.45		201.53	2,669.96
Total reserves	20,870.64	109,486.79	10,126.76	50,792.63	111,099.30
SURPLUS					
Debentures paid	11,582.82	33,257.82	3,034.90	11,585.83	75,102.66
Local sinking fund					
Operating surplus	8,742.27	48,466.87	3,786.13	24,026.67	14,840.17
Total surplus	20,325.09	81,724.69	6,821.03	35,612.50	89,942.83
Total liabilities, reserves and surplus	44,350.93	208,786.16	19,149.89	93,634.41	293,854.83
Percentage of net debt to total assets	10.3	13.2	17.7	13.2	36.4

"A"—Continued

Hydro Municipalities as at December 31, 1936

Port Credit 1,750	Port Dalhousie 1,408	Port Dover 1,606	Port Rowan 666	Port Stanley 769	Preston 6,287	Princeton P.V.	Queenston P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
675.00		248.75		1,574.60			
					50,727.43		
25,052.49	18,895.74	32,102.59	9,240.51	21,947.05	90,896.67	4,309.69	8,059.40
10,323.08	10,195.74	11,207.33	1,435.32	12,670.02	47,966.88	2,473.48	2,780.96
9,905.74	9,653.82	8,065.75	1,986.06	10,374.24	39,109.12	1,255.29	1,568.03
4,922.71	1,041.19	2,673.13	890.49	1,985.76	5,442.53	199.05	422.43
831.49	2,392.88	2,765.44	695.53	6,260.88	8,669.04	64.35	2,188.41
	6,018.38			577.51	32,126.75		
51,710.51	48,197.75	57,062.99	14,247.91	55,390.06	274,938.42	8,301.86	15,019.23
2,907.36	3,365.72	5,692.48	1,483.57	8,115.09	47,992.44	4,832.21	430.10
	3,000.00			3,000.00			
3,989.50	3,483.46	2,255.64	550.62	1,437.84	12,259.49	829.40	251.77
			48.03		309.32		
	3,609.10						
28,090.41	24,283.88	17,969.37	4,819.32	29,453.33	197,142.10	6,524.03	4,995.30
		20.00					
86,697.78	85,939.91	83,000.48	21,149.45	97,396.32	532,641.77	20,487.50	20,696.40
86,697.78	85,939.91	83,000.48	21,149.45	97,396.32	532,641.77	20,487.50	20,696.40
6,378.79	7,143.62	6,626.26	7,563.76	4,687.27	37,554.53	1,492.65	4,069.02
503.34		3,090.26	50.00		6,180.93		
495.00	113.00	623.00	50.00	80.01	1,183.79		1.50
7,377.13	7,256.62	10,339.52	7,663.76	4,767.28	44,919.25	1,492.65	4,070.52
28,090.41	24,283.88	17,969.37	4,819.32	29,453.33	197,142.10	6,524.03	4,995.30
16,229.53	6,753.83	9,925.03	2,585.97	12,188.57	113,427.25	2,759.44	3,483.75
650.00	926.31			79.95	460.08		
44,969.94	31,964.02	27,894.40	7,405.29	41,721.85	311,029.43	9,283.47	8,479.05
8,121.21	15,356.38	22,373.74	3,436.24	14,262.73	115,245.47	2,057.35	5,430.98
	3,609.10						
26,229.50	27,753.79	22,392.82	2,644.16	36,644.46	61,447.62	7,654.03	2,715.85
34,350.71	46,719.27	44,766.56	6,080.40	50,907.19	176,693.09	9,711.38	8,146.83
86,697.78	85,939.91	83,000.48	21,149.45	97,396.32	532,641.77	20,487.50	20,696.40
12.6	6.2	15.8	46.9	7.0	13.4	10.7	26.0

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Richmond Hill	Ridgetown	Riverside	Rockwood	Rodney
Population	1,234	1,985	4,820	P.V.	713
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings			2,528.73	79.00	
Substation equipment	600.00	1,024.24			
Distribution system—overhead	10,715.78	22,224.08	91,840.85	7,725.79	10,908.25
Distribution system—underground					
Line transformers	9,040.60	9,910.62	31,965.50	2,662.83	2,890.98
Meters	5,418.26	9,635.96	22,971.37	2,931.34	3,566.05
Street light equipment, regular	1,334.77	3,695.51		689.83	688.07
Street light equipment, ornamental		1,431.73	17,030.71		
Miscellaneous construction expense	28.00	2,327.71	6,379.08	441.75	734.22
Steam or hydraulic plant					
Old plant		5,088.46			700.00
Total plant	27,137.41	55,338.31	172,716.24	14,530.54	19,487.57
Bank and cash balance	2,985.37	2,962.23	12,381.92	1,345.86	4,016.53
Securities and investments		11,000.00			
Accounts receivable	1,426.46	1,066.72	17,264.26	32.60	219.14
Inventories	354.28	662.10	114.83	93.27	
Sinking fund on local debentures					
Equity in H-E.P.C. systems	12,805.52	30,911.58	59,815.40	8,380.66	9,549.84
Other assets	310.55		510.25		
Total assets	45,019.59	101,940.94	262,802.90	24,382.93	33,273.08
Deficit					
Total	45,019.59	101,940.94	262,802.90	24,382.93	33,273.08
LIABILITIES					
Debenture balance	2,581.53	5,188.77	41,197.77	2,082.22	
Accounts payable	121.46	556.02	24,107.45	20.94	14.00
Bank overdraft					
Other liabilities	310.55	1,951.73	19,976.88	81.00	205.00
Total liabilities	3,013.54	7,696.52	85,282.10	2,184.16	219.00
RESERVES					
For equity in H-E.P.C. systems	12,805.52	30,911.58	59,815.40	8,380.66	9,549.84
For depreciation	2,287.29	14,434.28	33,938.55	5,209.25	2,689.22
Other reserves		275.00	4,619.13		
Total reserves	15,092.81	45,620.86	98,373.08	13,589.91	12,239.06
SURPLUS					
Debentures paid	9,618.47	14,267.22	41,302.23	2,417.78	8,500.00
Local sinking fund					
Operating surplus	17,294.77	34,356.34	37,845.49	6,191.08	12,315.02
Total surplus	26,913.24	48,623.56	79,147.72	8,608.86	20,815.02
Total liabilities, reserves and surplus	45,019.59	101,940.94	262,802.90	24,382.93	33,273.08
Percentage of net debt to total assets	9.4	9.0	36.7	13.7	0.9

"A"—Continued

Hydro Municipalities as at December 31, 1936

St. Catharines 26,571	St. Clair Beach 148	St. George P.V.	St. Jacobs P.V.	St. Marys 4,032	St. Thomas 16,156	Sarnia 18,064
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
52,484.81	...	...	...	3,000.00	77,651.96	112,246.86
112,047.42	...	...	...	26,975.49	110,146.39	199,922.48
214,144.70	8,087.48	5,894.75	6,666.27	58,128.02	115,272.85	218,820.44
...	...	...	...	...	52,815.87	...
146,383.85	2,726.36	2,729.42	2,539.38	20,392.77	54,777.18	87,421.73
92,727.17	1,464.70	2,920.31	2,994.96	22,670.06	71,817.03	75,029.83
18,880.32	...	286.41	368.97	5,831.19	21,372.57	25,327.26
29,486.71	...	...	...	...	3,693.04	8,271.83
27,460.45	212.72	374.18	618.51	3,815.21	6,862.19	22,018.09
...	...	...	...	...	...	...
17,507.89	...	...	...	20,696.85	...	55,445.72
711,123.32	12,491.26	12,205.07	13,188.09	161,509.59	514,409.08	804,504.24
28,406.90	1,034.10	1,280.13	...	10,350.44	19,322.21	45,689.45
20,000.00	...	...	3,000.00	...	43,206.81	30,000.00
36,667.85	976.49	605.32	694.93	5,323.15	23,277.09	36,957.28
10,240.76	...	...	...	2,207.46	8,435.05	18,165.01
75,985.41	...	...	...	1,667.15	...	...
402,351.39	4,846.53	10,370.12	11,055.34	100,471.79	356,802.09	449,052.97
194.89	...	...	...	119.30	...	4,838.50
1,284,970.52	19,348.38	24,460.64	27,938.36	281,648.88	965,452.33	1,389,207.45
...	...	...	...	...	...	...
1,284,970.52	19,348.38	24,460.64	27,938.36	281,648.88	965,452.33	1,389,207.45
168,732.92	2,515.71	2,622.05	475.39	33,891.50	1,762.44	71,160.28
21,589.54	33.00	4.44	184.79	...	...	...
...	...	...	112.84	...	...	...
29,761.21	117.43	130.00	...	147.50	14,097.78	13,110.33
220,083.67	2,666.14	2,756.49	773.02	34,039.00	15,860.22	84,270.61
402,351.39	4,846.53	10,370.12	11,055.34	100,471.79	356,802.09	449,052.97
166,982.26	3,289.93	2,751.61	3,811.50	56,249.24	132,500.48	163,325.67
9,542.10	262.67	...	...	601.82	636.03	2,052.02
578,875.75	8,399.13	13,121.73	14,866.84	157,322.85	489,938.60	614,430.66
133,289.99	3,825.74	3,377.95	5,524.61	80,355.52	137,181.63	266,839.72
75,985.41	...	...	...	1,667.15	...	...
276,735.70	4,457.37	5,204.47	6,773.89	8,264.36	322,471.88	423,666.46
486,011.10	8,283.11	8,582.42	12,298.50	90,287.03	459,653.51	690,506.18
1,284,970.52	19,348.38	24,460.64	27,938.36	281,648.88	965,452.33	1,389,207.45
14.9	18.5	19.6	4.6	18.0	2.0	8.2

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality Population	Scarboro Twp.	Seaforth 1,717	Simcoe 5,503	Spring-field 386	Stamford Twp.
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	17,273.95	1,830.92	9,757.66	....	7,196.71
Substation equipment	301.95	5,999.16	30,768.82	....	37,384.60
Distribution system—overhead	283,046.79	28,265.51	51,002.79	7,997.40	131,711.95
Distribution system—underground	....	....	1,412.24	....	....
Line transformers	63,368.92	11,015.60	27,012.08	2,374.19	45,987.83
Meters	67,158.48	10,221.54	26,805.39	2,104.35	32,577.87
Street light equipment, regular	19,888.85	1,414.55	5,824.25	558.91	9,738.05
Street light equipment, ornamental	....	....	3,500.00	....	....
Miscellaneous construction expense	1,281.43	453.33	5,352.59	685.08	8,834.87
Steam or hydraulic plant	....	....	....	....	....
Old plant	....	....	927.92	....	13,743.66
Total plant	452,320.37	59,200.61	162,363.74	13,719.93	287,175.54
Bank and cash balance	124,654.50	7,738.57	20,809.81	1,843.28	2,916.33
Securities and investments	2,680.00	100.00	....	4,500.00	....
Accounts receivable	16,895.09	4,216.67	5,451.39	754.72	21,650.80
Inventories	....	1,556.01	3,710.57	....	6,813.60
Sinking fund on local debentures	....	....	....	....	....
Equity in H-E.P.C. systems	125,623.14	47,321.34	71,476.90	7,021.75	68,210.78
Other assets	....	....	....	....	5,357.28
Total assets	722,173.10	120,133.20	263,812.41	27,839.68	392,124.33
Deficit	....	....	....	....	....
Total	722,173.10	120,133.20	263,812.41	27,839.68	392,124.33
LIABILITIES					
Debenture balance	148,367.51	....	45,129.77	3,047.20	135,834.65
Accounts payable	91,773.24	....	308.47	30.59	18,865.90
Bank overdraft	....	....	....	....	....
Other liabilities	29,587.77	103.00	3,710.00	57.00	4,702.52
Total liabilities	269,728.52	103.00	49,148.24	3,134.79	159,403.07
RESERVES					
For equity in H-E.P.C. systems	125,623.14	47,321.34	71,476.90	7,021.75	68,210.78
For depreciation	90,712.73	21,944.28	19,567.60	3,363.25	39,359.65
Other reserves	837.86	927.43	....	....	2,914.79
Total reserves	217,173.73	70,193.05	91,044.50	10,385.00	110,485.22
SURPLUS					
Debentures paid	142,200.76	25,000.00	30,305.13	6,452.80	104,443.52
Local sinking fund	....	....	....	....	....
Operating surplus	93,070.09	24,837.15	93,314.54	7,867.09	17,792.52
Total surplus	235,270.85	49,837.15	123,619.67	14,319.89	122,236.04
Total liabilities, reserves and surplus	722,173.10	120,133.20	263,812.41	27,839.68	392,124.33
Percentage of net debt to total assets	45.2	0.1	24.1	15.0	49.2

"A"—Continued

Hydro Municipalities as at December 31, 1936

Stouffville 1,149	Stratford 17,643	Strathroy 2,886	Streetsville 676	Sutton 804	Tavistock 1,029	Tecumseh 2,472	Thamesford P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
....	138,889.22	8,856.05	2,038.47	....	262.29	1,018.51	....
....	120,984.65	23,219.34	1,172.04	....	....	....	....
12,725.61	154,738.42	50,502.60	8,438.71	20,462.92	13,375.07	35,029.49	7,757.33
....							....
4,175.67	94,226.20	21,684.26	4,922.49	7,278.75	6,251.28	11,316.12	2,625.63
4,687.91	84,808.53	15,899.51	2,650.85	5,911.53	5,075.72	10,627.71	2,748.94
1,604.52	22,989.11	5,814.75	1,049.40	1,802.61	1,034.99	....	290.65
....	....	....	....	....	....	4,760.95	....
596.53	18,001.07	2,230.57	680.53	1,807.82	548.03	1,938.18	331.55
....	....	....	10,641.55	....	....	....	....
....	31,520.00	12,343.15	....	675.00	....	....	....
23,790.24	666,157.20	140,550.23	31,594.04	37,938.63	26,547.38	64,690.96	13,754.10
2,285.05	30,117.95	4,694.19	3,432.55	2,197.74	4,240.12	6,951.87	1,311.78
8,000.00	70,000.00	16,787.29	....	....	2,584.78	....	8,500.00
889.54	29,815.87	6,279.87	768.46	1,932.74	1,810.11	4,203.35	710.75
30.00	8,311.71	2,983.67	....	....	....	....	....
....	215,081.70	....	....	....	....	....	....
11,325.92	448,585.52	63,740.46	730.34	10,816.32	32,744.53	18,412.38	12,533.87
65.00	4,365.66	....	....	....	....	....	....
46,385.75	1,472,435.61	235,035.71	36,525.39	52,885.43	67,926.92	94,258.56	36,810.50
....	....	....	....	....	....	....	....
46,385.75	1,472,435.61	235,035.71	36,525.39	52,885.43	67,926.92	94,258.56	36,810.50
2,775.93	340,000.00	29,618.43	14,039.36	11,790.85	3,013.91	10,292.46	1,165.28
157.78	458.16	333.24	....	1,772.62	....	10,548.24	....
....	....	....	....	....	....	....	....
65.00	4,365.66	595.59	136.37	....	....	5,929.49	48.00
2,998.71	344,823.82	30,547.26	14,175.73	13,563.47	3,013.91	26,770.19	1,213.28
11,325.92	448,585.52	63,740.46	730.34	10,816.32	32,744.53	18,412.38	12,533.87
3,346.16	265,528.72	31,079.49	2,489.04	6,971.11	9,866.41	13,189.01	5,821.63
....	4,815.27	281.72	22.34	....	....	1,557.86	....
14,672.08	718,929.51	95,101.67	3,241.72	17,787.43	42,610.94	33,159.25	18,355.50
11,897.97	115,800.00	36,613.57	3,505.72	14,209.15	2,986.09	15,707.54	4,192.75
....	215,081.70	....	....	....	....	....	....
16,816.99	77,800.58	72,773.21	15,602.22	7,325.38	19,315.98	18,621.58	13,048.97
28,714.96	408,682.28	109,386.78	19,107.94	21,534.53	22,302.07	34,329.12	17,241.72
46,385.75	1,472,435.61	235,035.71	36,525.39	52,885.43	67,926.92	94,258.56	36,810.50
8.6	16.0	17.8	39.6	32.2	8.5	30.9	5.0

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Thames-ville	Thedford	Thorndale	Thorold	Tilbury
Population	769	583	P.V.	4,959	1,975
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	681.69			9,892.59	969.46
Substation equipment					
Distribution system—overhead	12,444.62	9,328.74	3,324.47	32,988.22	16,150.42
Distribution system—underground					
Line transformers	5,135.49	3,392.91	1,559.98	17,644.27	12,761.37
Meters	3,904.70	2,232.13	1,762.68	20,654.35	7,157.23
Street light equipment, regular	1,379.42	885.46	181.19	2,895.84	1,029.37
Street light equipment, ornamental					
Miscellaneous construction expense	599.04	1,577.21	310.45	3,312.97	1,751.84
Steam or hydraulic plant				13,380.93	
Old plant	4,445.68	433.78		3,800.00	3,049.47
Total plant	28,590.64	17,850.23	7,138.77	104,569.17	42,869.16
Bank and cash balance	2,730.87	925.92	675.94	23,870.76	6,403.17
Securities and investments	5,000.00	2,500.00			10,000.00
Accounts receivable	1,302.93	420.27	760.82	2,189.37	1,236.82
Inventories				166.99	
Sinking fund on local debentures					
Equity in H-E.P.C. systems	12,714.28	6,760.34	6,501.41	68,078.30	33,588.45
Other assets				81.24	231.12
Total assets	50,338.72	28,456.76	15,076.94	198,955.83	94,328.72
Deficit					
Total	50,338.72	28,456.76	15,076.94	198,955.83	94,328.72
LIABILITIES					
Debenture balance		6,059.64	1,144.92		4,479.37
Accounts payable		3.12	3.13	4,779.99	212.54
Bank overdraft					
Other liabilities	175.00	28.00	38.50	1,777.50	3.38
Total liabilities	175.00	6,090.76	1,186.55	6,557.49	4,695.29
RESERVES					
For equity in H-E.P.C. systems	12,714.28	6,760.34	6,501.41	68,078.30	33,588.45
For depreciation	8,167.26	3,304.53	3,321.53	27,280.89	11,877.94
Other reserves	462.18		100.00		128.53
Total reserves	21,343.72	10,064.87	9,922.94	95,359.19	45,594.92
SURPLUS					
Debentures paid	11,187.80	10,440.36	1,941.56	5,000.00	9,520.63
Local sinking fund					
Operating surplus	17,632.20	1,860.77	2,025.89	92,039.15	34,517.88
Total surplus	28,820.00	12,301.13	3,967.45	97,039.15	44,038.51
Total liabilities, reserves and surplus	50,338.72	28,456.76	15,076.94	198,955.83	94,328.72
Percentage of net debt to total assets	0.5	28.1	13.8	5.0	7.7

"A"—Continued

Hydro Municipalities as at December 31, 1936

Tillsonburg 3,513	Toronto 638,271	Toronto Twp.	Trafalgar Twp. Area No. 1	Trafalgar Twp. Area No. 2	Wallaceburg 4,589	Wardsville 257
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
4,824.27	5,417,093.64	6,366.13			37,746.29	
13,937.52	14,642,640.12				9,651.80	
44,347.15	6,324,352.29	189,000.76	21,877.84	11,781.86	58,099.77	5,076.88
	4,141,310.91					
17,423.00	3,613,921.74	59,209.97	9,704.34	2,331.94	35,173.82	1,501.32
17,615.02	3,142,887.34	34,731.57	4,889.87	1,470.05	20.187.83	1,205.94
11,482.66	490,095.79	3,717.44			10,188.30	519.36
4,084.16	2,610,100.73	1,985.95	1,701.75	336.71	4,315.75	512.73
	3,570,474.01	619.65			20,941.07	193.94
113,713.78	43,952,876.57	295,631.47	38,173.80	15,920.56	196,304.63	9,010.17
7,827.31	1,580,374.46	16,835.40	3,538.92	2,021.85	24,724.78	541.32
9,000.00		10,000.00	4,000.00	3,000.00		
3,780.88	1,984,315.47	3,144.58	788.15	291.77	7,929.66	1,161.11
3,666.25	503,787.56				6,639.69	
	6,926,266.07					
63,347.22	14,030,736.71	72,896.37			136,245.39	2,620.26
3,047.89	13,324.86				2,111.91	
204,383.33	68,991,681.70	398,507.82	46,500.87	21,234.18	373,956.06	13,332.86
204,383.33	68,991,681.70	398,507.82	46,500.87	21,234.18	373,956.06	13,332.86
6,752.72	22,203,906.79	44,667.29	9,510.91	9,461.15	35,316.33	2,937.84
93.30	1,787,378.36	1,941.85				
3,034.34	174,272.79	2,471.26			2,111.91	5.00
9,880.36	24,165,557.94	49,080.40	9,510.91	9,461.15	37,428.24	2,942.84
63,347.22	14,030,736.71	72,896.37			136,245.39	2,620.26
35,990.26	8,104,733.59	109,579.14	14,602.64	2,087.60	49,902.52	2,509.74
825.07	1,067,187.97	862.42			780.98	
100,162.55	23,202,658.27	183,337.93	14,602.64	2,087.60	186,928.89	5,130.00
29,247.28	12,247,399.99	59,332.71	9,915.50		36,220.25	4,624.56
	6,926,266.07					
65,093.14	2,449,799.43	106,756.78	12,471.82	9,685.43	113,378.68	635.46
94,340.42	21,623,465.49	166,089.49	22,387.32	9,685.43	149,598.93	5,260.02
204,383.33	68,991,681.70	398,507.82	46,500.87	21,234.18	373,956.06	13,332.86
7.0	35.9	15.1	20.4	44.5	15.7	27.5

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Water-down	Waterford	Waterloo	Watford	Welland
Population	912	1,173	8,310	916	10,402
Assets	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	200.00		14,454.37		73,269.45
Substation equipment			63,616.53		69,924.22
Distribution system—overhead	16,146.32	15,772.78	92,662.85	16,748.13	133,611.04
Distribution system—underground					7,475.04
Line transformers	6,051.50	7,444.87	40,434.57	6,974.81	57,579.31
Meters	5,961.12	6,003.61	36,470.57	5,551.36	58,386.60
Street light equipment, regular	583.81	3,231.62	14,159.61	807.31	4,265.01
Street light equipment, ornamental			3,106.80		36,513.75
Miscellaneous construction expense	239.66	476.76	8,811.83	2,013.90	10,522.79
Steam or hydraulic plant					
Old plant			23,880.17	657.44	49,964.19
Total plant	29,182.41	32,929.64	297,597.30	32,752.95	501,511.40
Bank and cash balance	5,472.15	2,550.17	17,309.49	1,231.02	523.51
Securities and investments		5,300.00	25,000.00	6,800.00	6,065.13
Accounts receivable	1,651.86	701.13	2,446.43	975.66	26,638.70
Inventories			540.00	127.84	14,804.86
Sinking fund on local debentures			13,571.76		139,422.06
Equity in H-E.P.C. systems	17,221.34	23,421.32	189,264.71	16,284.59	214,633.85
Other assets					19,989.38
Total assets	53,527.76	64,902.26	545,729.69	58,172.06	923,588.89
Deficit					
Total	53,527.76	64,902.26	545,729.69	58,172.06	923,588.89
Liabilities					
Debenture balance			38,864.23		237,598.67
Accounts payable			1,169.36		13,283.18
Bank overdraft					
Other liabilities	89.78		3,106.80	112.00	44,323.20
Total liabilities	89.78		43,140.39	112.00	295,205.05
Reserves					
For equity in H-E.P.C. systems	17,221.34	23,421.32	189,264.71	16,284.59	214,633.85
For depreciation	7,408.87	11,113.20	115,092.57	7,681.39	130,528.52
Other reserves			300.00	20.64	3,940.14
Total reserves	24,630.21	34,534.52	304,657.28	23,986.62	349,102.51
Surplus					
Debentures paid	8,000.00	7,745.53	67,135.77	9,713.21	61,401.33
Local sinking fund			13,571.76		139,422.06
Operating surplus	20,807.77	22,622.21	117,224.49	24,360.23	78,457.94
Total surplus	28,807.77	30,367.74	197,932.02	34,073.44	279,281.33
Total liabilities, reserves and surplus	53,527.76	64,902.26	545,729.69	58,172.06	923,588.89
Percentage of net debt to total assets	0.2	0.0	7.8	0.3	22.3

"A"—Continued

Hydro Municipalities as at December 31, 1936

Wellesley	West Lorne	Weston	Wheatley	Windsor	Woodbridge	Woodstock
P.V.	752	5,040	723	98,745	811	10,936
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		11,903.31		466,528.98		35,489.71
		32,737.85		837,657.11		110,557.90
6,799.93	11,376.48	60,897.41	15,419.07	1,207,853.62	16,853.38	107,953.84
				142,009.59		
2,153.50	4,274.36	35,953.39	4,242.44	541,826.00	6,510.77	56,440.61
2,571.82	3,158.14	23,550.96	3,850.78	496,088.73	4,561.71	57,290.97
545.11	655.65	29,813.30	1,690.74	51,305.50	471.33	15,543.65
				1,021,495.33		
295.49	347.14	5,514.73	1,004.76	172,032.94	826.25	4,412.63
	1,250.00		2,569.50	167,579.04		
12,365.85	21,061.77	200,370.95	28,777.29	5,104,376.84	29,223.44	387,689.31
1,430.18	2,092.48	24,490.46	4,389.95	208,077.57	2,014.19	6,385.96
			1,500.00	254,054.47		86,000.00
410.49	67.64	5,284.97	602.82	319,980.31	1,609.85	5,836.77
		229.86	61.92	125,504.43		827.66
				62,457.87		37,024.95
12,609.46	19,978.73	168,410.20	9,222.80	2,222,797.36	21,670.55	283,389.74
			40.00			10,876.01
26,815.98	43,200.62	398,786.44	44,594.78	8,297,248.85	54,518.03	818,030.40
26,815.98	43,200.62	398,786.44	44,594.78	8,297,248.85	54,518.03	818,030.40
		28,349.45	6,182.11	1,240,704.31	4,065.90	44,390.31
0.83	100.96		19.75	98,527.10	129.64	133.55
	46.00	2,572.95	30.00	1,127,425.94	324.01	6,683.90
0.83	146.96	30,922.40	6,231.86	2,466,657.35	4,519.55	51,207.76
12,609.46	19,978.73	168,410.20	9,222.80	2,222,797.36	21,670.55	283,389.74
3,085.32	7,716.14	42,809.50	4,525.66	840,229.68	9,192.66	157,812.08
	25.76	1,149.30		234,886.05		15,500.72
15,694.78	27,720.63	212,369.00	13,748.46	3,297,913.09	30,863.21	456,702.54
7,500.00	8,000.00	41,682.99	6,817.89	1,343,127.75	4,434.07	82,995.32
				62,457.87		37,024.95
3,620.37	7,333.03	113,812.05	17,796.57	1,127,092.79	14,701.20	190,099.83
11,120.37	15,333.03	155,495.04	24,614.46	2,532,678.41	19,135.27	310,120.10
26,815.98	43,200.62	398,786.44	44,594.78	8,297,248.85	54,518.03	818,030.40
0.0	0.6	13.4	17.6	27.7	13.8	2.9

STATEMENT

Balance Sheets of Electrical Departments of

NIAGARA SYSTEM—Concluded

Municipality Population	Wyoming 504	York Twp.	Zurich P.V.	NIAGARA SYSTEM SUMMARY
	$ c.	$ c.	$ c.	$ c.
Assets				
Lands and buildings				8,901,566.37
Substation equipment				20,635,587.73
Distribution system—overhead	7,984.17	798,974.80	6,969.43	17,424,041.08
Distribution system—underground				5,648,819.04
Line transformers	1,470.55		1,850.90	8,356,007.36
Meters	2,442.46		2,353.49	7,308,078.21
Street light equipment, regular	289.62	50,124.98	471.82	1,787,541.17
Street light equipment, ornamental				1,504,596.77
Miscellaneous construction expense	805.20	19,070.96	269.97	3,623,366.29
Steam or hydraulic plant				24,022.48
Old plant			150.00	4,343,975.16
Plant not distributed				200,000.00
Total plant	12,992.00	868,170.74	12,065.61	79,757,601.66
Bank and cash balance	1,952.42	2,100.50	1,948.77	3,126,910.77
Securities and investments			2,000.00	1,040,351.56
Accounts receivable	187.00	49,398.20	588.13	3,777,001.45
Inventories				1,107,252.98
Sinking fund on local debentures				8,481,812.05
Equity in H-E.P.C. systems	6,018.27		9,821.20	31,862,420.08
Other assets		14,260.21		171,076.10
Total assets	21,149.69	933,929.65	26,423.71	129,324,426.65
Deficit	167.72			2,756.37
Total	21,317.41	933,929.65	26,423.71	129,327,183.02
Liabilities				
Debenture balance		332,523.90	3,158.99	31,130,048.25
Accounts payable		11,237.03		2,630,415.52
Bank overdraft				7,313.14
Other liabilities	30.00		30.00	3,149,626.64
Total liabilities	30.00	343,760.93	3,188.99	36,917,403.55
Reserves				
For equity in H-E.P.C. systems	6,018.27		9,821.20	31,862,420.08
For depreciation	5,569.14	215,157.85	5,153.70	16,159,432.29
Other reserves				2,145,117.29
Total reserves	11,587.41	215,157.85	14,974.90	50,166,969.66
Surplus				
Debentures paid	9,700.00	267,476.10	2,432.62	21,939,339.07
Local sinking fund				8,481,812.05
Operating surplus		107,534.77	5,827.20	11,821,658.69
Total surplus	9,700.00	375,010.87	8,259.82	42,242,809.81
Total liabilities, reserves and surplus	21,317.41	933,929.65	26,423.71	129,327,183.02
Percentage of net debt to total assets	0.2	36.8	19.2	30.8

"A"—Continued

Hydro Municipalities as at December 31, 1936

GEORGIAN BAY SYSTEM

Alliston	Arthur	Barrie	Beaverton	Beeton	Bradford	Brechin	Canning-ton
1,412	1,052	7,856	920	585	999	P.V.	757
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		14,199.11	299.50				
675.73		15,285.02		428.50	388.50		
26,880.40	17,792.43	59,326.28	24,509.12	11,753.79	19,711.31	1,789.59	10,411.41
		66,437.67					
6,535.77	4,253.99	41,294.33	8,213.14	2,228.23	4,677.65	1,126.71	4,262.88
6,810.16	3,666.06	41,282.25	6,288.68	2,089.31	4,423.93	726.95	4,405.05
1,549.02	796.21	12,146.42	1,267.25	1,169.54	544.95	212.44	924.69
2,723.57	358.35	8,848.00	2,616.66	1,585.26	2,168.55	553.28	694.38
7,846.49	1,086.62		3,772.42				3,609.37
53,021.14	27,953.66	258,819.08	46,966.77	19,254.63	31,914.89	4,408.97	24,307.78
2,810.64	27.20	7,688.94	681.17	2,000.39	4,897.88	1,426.25	2,860.26
		9,000.00	7,000.00		1,000.00		1,326.62
2,793.90	735.90	14,278.62	1,607.85	1,205.51	2,290.57	847.90	889.19
		1,822.77		5.18			165.25
15,967.66	14,422.99	103,028.58	15,612.00	11,663.93	13,146.98	5,998.22	11,798.25
2.50		1,261.39	463.47		217.39	24.85	24.00
74,595.84	43,139.75	395,899.38	72,331.26	34,129.64	53,467.71	12,706.19	41,371.35
	11,135.76			321.58			
74,595.84	54,275.51	395,899.38	72,331.26	34,451.22	53,467.71	12,706.19	41,371.35
21,258.60	15,215.54	17,933.77	4,764.14	8,648.51	15,561.67	1,824.82	5,929.38
1.09	1,789.31	493.65	133.58	11.45	639.83		105.95
2.50		1,123.46	463.47		217.39	24.85	24.00
21,262.19	17,004.85	19,550.88	5,361.19	8,659.96	16,418.89	1,849.67	6,059.33
15,967.66	14,422.99	103,028.58	15,612.00	11,663.93	13,146.98	5,998.22	11,798.25
14,793.00	13,063.21	75,717.56	11,660.72	7,775.84	9,906.01	1,979.47	9,334.11
		400.00					
30,760.66	27,486.20	179,146.14	27,272.72	19,439.77	23,052.99	7,977.69	21,132.36
18,741.40	9,784.46	47,431.91	10,235.86	6,351.49	9,638.33	1,386.10	9,070.62
3,831.59		149,770.45	29,461.49		4,357.50	1,492.73	5,109.04
22,572.99	9,784.46	197,202.36	39,697.35	6,351.49	13,995.83	2,878.83	14,179.66
74,595.84	54,275.51	395,899.38	72,331.26	34,451.22	53,467.71	12,706.19	41,371.35
36.3	59.2	6.7	9.5	38.5	38.8	27.6	20.5

STATEMENT

Balance Sheets of Electrical Departments of

GEORGIAN BAY SYSTEM—Continued

Municipality	Chatsworth	Chesley	Coldwater	Collingwood	Cookstown
Population	302	1,759	617	5,749	P.V.
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	364.89		275.00	15,950.08	60.00
Substation equipment		595.98		11,203.24	392.95
Distribution system—overhead	5,000.64	20,312.40	8,184.91	48,168.13	9,136.76
Distribution system—underground					
Line transformers	1,639.93	6,958.73	2,779.67	17,032.06	2,232.60
Meters	1,556.97	6,619.57	2,780.56	22,177.54	2,217.67
Street light equipment, regular	529.17	1,350.20	775.02	2,876.90	701.86
Street light equipment, ornamental					
Miscellaneous construction expense	397.82	3,560.69	304.91	1,146.00	1,533.75
Steam or hydraulic plant					
Old plant		5,503.60			
Total plant	9,489.42	44,901.17	15,100.07	118,553.95	16,275.59
Bank and cash balance	1,769.79	1,777.07	225.13	13,754.24	6,235.52
Securities and investments		10,000.00	4,000.00	16,000.00	
Accounts receivable	722.04	1,369.35	2,329.24	4,952.53	562.54
Inventories	17.44	135.42		122.06	25.92
Sinking fund on local debentures					
Equity in H-E.P.C. systems	3,106.58	25,990.76	10,433.72	103,407.17	3,760.01
Other assets			103.00	2,039.73	15.00
Total assets	15,105.27	84,173.77	32,191.16	258,829.68	26,874.58
Deficit					
Total	15,105.27	84,173.77	32,191.16	258,829.68	26,874.58
LIABILITIES					
Debenture balance	326.12	425.84	2,737.09		5,592.63
Accounts payable	473.48	3.46	116.26	29.24	18.27
Bank overdraft					
Other liabilities			103.00	2,039.73	15.00
Total liabilities	799.60	429.30	2,956.35	2,068.97	5,625.90
RESERVES					
For equity in H-E.P.C. systems	3,106.58	25,990.76	10,433.72	103,407.17	3,760.01
For depreciation	2,744.91	16,629.58	8,176.74	52,137.75	6,665.22
Other reserves				300.00	
Total reserves	5,851.49	42,620.34	18,610.46	155,844.92	10,425.23
SURPLUS					
Debentures paid	5,073.88	27,074.16	4,262.91	38,183.42	7,907.37
Local sinking fund					
Operating surplus	3,380.30	14,049.97	6,361.44	62,732.37	2,916.08
Total surplus	8,454.18	41,124.13	10,624.35	100,915.79	10,823.45
Total liabilities, reserves and surplus	15,105.27	84,173.77	32,191.16	258,829.68	26,874.58
Percentage of net debt to total assets	6.7	0.7	13.6	1.3	24.3

"A"—Continued

Hydro Municipalities as at December 31, 1936

Creemore 649	Dundalk 646	Durham 1,823	Elmvale P.V.	Elmwood P.V.	Flesherton 469	Grand Valley 572	Gravenhurst 1,997
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
....	....	56.59	106.25	....	....	36.50	4,019.14
....	....	546.02	2,273.07	....	....	....	5,318.56
7,291.01	7,897.45	21,976.46	8,769.76	4,822.81	5,446.88	11,341.14	28,240.96
....	....	....	....	....	....	....	....
3,171.36	3,514.90	7,744.30	4,087.14	833.38	1,797.67	2,179.63	8,100.55
3,021.57	2,698.01	7,377.61	3,675.33	1,128.92	2,260.97	2,954.95	9,715.57
295.27	1,082.10	1,408.66	447.17	302.28	720.51	987.12	4,103.52
....	....	....	....	....	....	....	....
36.62	368.65	1,863.96	555.24	1,093.62	937.11	226.76	3,217.01
....	....	....	....	....	....	....	....
....	....	2,091.39	....	....	....	919.85	28,055.29
13,815.83	15,561.11	43,064.99	19,913.96	8,181.01	11,163.14	18,645.95	90,770.60
1,115.83	3,456.14	4,485.89	2,948.09	1,521.42	2,283.21	598.16	638.76
2,000.00	3,000.00	7,000.00	2,500.00	2,000.00	2,500.00	5,128.60	10,000.00
651.11	644.81	1,972.91	330.19	191.16	390.75	363.70	2,996.34
....	19.46	390.11	8.64	....	....	29.08	374.06
....	....	....	....	456.96	....	....	9,333.42
8,830.78	8,906.20	23,380.61	11,539.23	2,911.98	4,947.39	8,797.19	18,151.46
108.00	....	....	....	....	....	....	367.50
26,521.55	31,587.72	80,294.51	37,240.11	15,262.53	21,284.49	33,562.68	132,632.14
....	....	....	....	....	....	....	....
26,521.55	31,587.72	80,294.51	37,240.11	15,262.53	21,284.49	33,562.68	132,632.14
....	....	....	2,311.24	1,179.58	2,902.64	....	10,000.01
....	667.84	10.96	228.50	70.63	44.06	....	548.88
....	....	....	....	....	....	....	....
108.00	....	....	....	....	....	....	367.50
108.00	667.84	10.96	2,539.74	1,250.21	2,946.70	....	10,916.39
8,830.78	8,906.20	23,380.61	11,539.23	2,911.98	4,947.39	8,797.19	18,151.46
4,342.69	4,986.99	13,326.40	8,421.22	3,374.09	4,367.70	6,635.44	18,926.23
....	....	....	....	....	....	....	500.00
13,173.47	13,893.19	36,707.01	19,960.45	6,286.07	9,315.09	15,432.63	37,577.69
2,823.61	5,955.96	25,800.00	4,688.76	6,020.42	3,797.36	11,000.00	53,968.40
....	....	....	....	456.96	....	....	9,333.42
10,416.47	11,070.73	17,776.54	10,051.16	1,248.87	5,225.34	7,130.05	20,836.24
13,240.08	17,026.69	43,576.54	14,739.92	7,726.25	9,022.70	18,130.05	84,138.06
26,521.55	31,587.72	80,294.51	37,240.11	15,262.53	21,284.49	33,562.68	132,632.14
0.6	2.9	0.0	9.8	6.7	18.0	0.0	1.5

STATEMENT

Balance Sheets of Electrical Departments of

GEORGIAN BAY SYSTEM—Continued

Municipality	Hanover	Holstein	Huntsville	Kincardine	Kirkfield
Population	3,056	P.V.	2,718	2,468	P.V.
	$ c.	$ c.	$ c.	$ c.	$ c.
Assets					
Lands and buildings	3,001.32		353.52	6,531.80	
Substation equipment	9,271.19		647.30	2,794.20	
Distribution system—overhead	49,686.57	2,102.68	16,575.91	43,505.11	5,130.67
Distribution system—uncerground					
Line transformers	17,753.97	571.82	7,537.42	11,504.45	557.90
Meters	16,062.93	544.92	10,598.71	11,138.00	722.75
Street light equipment, regular	2,326.30	168.69	2,262.52	5,420.36	379.00
Street light equipment, ornamental					
Miscellaneous construction expense	5,349.56	205.93	1,574.30	5,374.75	301.53
Steam or hydraulic plant					
Old plant	2,370.91		5,436.20		
Total plant	105,822.75	3,594.04	44,985.88	86,268.67	7,091.85
Bank and cash balance	9,795.58	898.19	6,516.53	5,840.18	
Securities and investments	25,767.15	1,500.00	18,329.68		
Accounts receivable	2,914.11	481.65	2,093.84	396.45	438.01
Inventories	75.97	54.81	2,341.25	563.16	
Sinking fund on local debentures					
Equity in H-E.P.C. systems	60,687.98	1,978.07	41,910.63	28,207.77	2,341.70
Other assets			870.50	207.64	523.10
Total assets	205,063.54	8,506.76	117,048.31	121,483.87	10,394.66
Deficit					1,357.62
Total	205,063.54	8,506.76	117,048.31	121,483.87	11,752.28
Liabilities					
Debenture balance	16,270.79		687.79	20,444.62	1,812.84
Accounts payable	5,770.82	894.86	50.97	676.00	774.71
Bank overdraft					48.59
Other liabilities	6.00		870.50	90.60	
Total liabilities	22,047.61	894.86	1,609.26	21,211.22	2,636.14
Reserves					
For equity in H-E.P.C. systems	60,687.98	1,978.07	41,910.63	28,207.77	2,341.70
For depreciation	46,171.26	1,468.45	14,106.12	22,272.33	2,587.28
Other reserves			1,200.00		
Total reserves	106,859.24	3,446.52	57,216.75	50,480.10	4,928.98
Surplus					
Debentures paid	71,229.21	2,762.05	20,445.75	43,755.38	4,187.16
Local sinking fund					
Operating surplus	4,927.48	1,403.33	37,776.55	6,037.17	
Total surplus	76,156.69	4,165.38	58,222.30	49,792.55	4,187.16
Total liabilities, reserves and surplus	205,063.54	8,506.76	117,048.31	121,483.87	11,752.28
Percentage of net debt to total assets	15.3	13.7	2.1	22.7	32.7

"A"—Continued

Hydro Municipalities as at December 31, 1936

Lucknow 1,062	Markdale 791	Meaford 2,762	Midland 6,845	Mildmay 755	Mount Forest 1,743	Neustadt 484	Orangeville 2,792
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		1,116.53	19,983.57		3,725.00		2,585.07
	780.80	3,240.15	85,096.20		686.75		1,169.00
18,133.29	10,400.08	31,318.97	94,527.06	6,016.98	22,871.73	9,995.44	32,561.69
5,101.36	4,151.74	7,961.96	24,040.88	1,657.05	6,927.69	3,817.25	8,485.01
4,979.49	3,578.34	7,989.22	37,052.46	2,495.82	7,754.35	2,017.85	12,096.74
1,425.49	1,314.08	3,274.30	19,126.57	561.88	2,302.55	496.41	7,532.55
2,538.97	681.10	2,293.68	4,861.29	900.65	2,067.83	1,539.72	6,471.95
	2,080.65	3,453.38		849.00	3,810.95	1,097.60	3,204.99
32,178.60	22,986.79	60,648.19	284,688.03	12,481.38	50,146.85	18,964.27	74,107.00
1,719.97	3,852.16		11,678.26	1,792.33	1,125.36	3,095.41	4,856.60
4,500.00	1,255.13	16,853.60	29,000.00	2,500.00	4,000.00		9,500.00
1,006.23	1,604.22	1,000.18	11,321.36	441.63	3,393.25	2,813.02	3,043.39
		140.25	2,273.42	35.66	45.00	20.97	381.22
13,505.34	7,148.40	19,401.49	163,382.37	1,254.59	22,666.31	5,079.53	30,569.49
		1,127.56	803.20				
52,910.14	36,846.70	99,171.27	503,146.64	18,505.59	81,376.77	29,973.20	122,457.70
						196.15	
52,910.14	36,846.70	99,171.27	503,146.64	18,505.59	81,376.77	30,169.35	122,457.70
7,568.59	4,447.84	27,910.56	18,093.18	10,972.51	9,598.52	3,453.98	386.05
187.41	687.37		506.28			50.00	
		11.11					
	22.00	1,127.56	803.20				
7,756.00	5,157.21	29,049.23	19,402.66	10,972.51	9,598.52	3,503.98	386.05
13,505.34	7,148.40	19,401.49	163,382.37	1,254.59	22,666.31	5,079.53	30,569.49
6,936.95	6,058.09	12,075.65	137,696.48	888.00	18,147.94	8,039.82	25,633.86
			2,925.40				
20,442.29	13,206.49	31,477.14	304,004.25	2,142.59	40,814.25	13,119.35	56,203.35
12,154.77	4,552.16	21,449.64	93,976.81	1,330.99	21,360.08	13,546.02	35,513.95
12,557.08	13,930.84	17,195.26	85,762.92	4,059.50	9,603.92		30,354.35
24,711.85	18,483.00	38,644.90	179,739.73	5,390.49	30,964.00	13,546.02	65,868.30
52,910.14	36,846.70	99,171.27	503,146.64	18,505.59	81,376.77	30,169.35	122,457.70
19.7	17.4	36.4	5.7	63.6	16.3	14.1	0.4

STATEMENT

Balance Sheets of Electrical Departments of

GEORGIAN BAY SYSTEM—Continued

Municipality Population	Owen Sound 13,139	Paisley 752	Penetanguishene 3,989	Port Elgin 1,270	Port McNicoll 935
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	26,023.81		2,262.10	111.25	369.08
Substation equipment	15,131.59	1,933.26	7,076.39		
Distribution system—overhead	108,607.61	11,562.78	42,137.86	26,198.04	8,529.01
Distribution system—underground					
Line transformers	46,414.44	1,602.53	16,224.50	6,386.51	1,440.73
Meters	58,324.28	3,033.20	13,939.64	6,613.18	2,543.44
Street light equipment, regular	28,581.61	1,045.51	3,591.63	2,123.60	500.93
Street light equipment, ornamental					
Miscellaneous construction expense	3,817.72	837.45	1,364.50	585.56	626.60
Steam or hydraulic plant	33,282.00				
Old plant		1,745.00		4,213.00	
Total plant	320,183.06	21,759.73	86,596.62	46,231.14	14,009.79
Bank and cash balance	12,124.05	1,682.81	862.78	5,224.00	407.69
Securities and investments	25,000.00	4,000.00	718.96	10,000.00	
Accounts receivable	16,138.18	694.67	5,545.58	324.10	542.42
Inventories	9,769.00		149.18	10.80	
Sinking fund on local debentures					
Equity in H-E.P.C. systems	143,695.39	7,679.63	46,942.49	5,091.15	4,554.98
Other assets			312.75		
Total assets	526,909.68	35,816.84	141,128.36	66,881.19	19,514.88
Deficit					
Total	526,909.68	35,816.84	141,128.36	66,881.19	19,514.88
LIABILITIES					
Debenture balance		7,608.77	10,130.68	33,360.19	867.53
Accounts payable	84.74	179.60	1,472.89	3,760.42	46.79
Bank overdraft					
Other liabilities	3,498.50		312.75	10.00	
Total liabilities	3,583.24	7,788.37	11,916.32	37,130.61	914.32
RESERVES					
For equity in H-E.P.C. systems	143,695.39	7,679.63	46,942.49	5,091.15	4,554.98
For depreciation	69,594.18	4,969.52	34,184.03	4,744.23	4,966.26
Other reserves			1,000.00		
Total reserves	213,289.57	12,649.15	82,126.52	9,835.38	9,521.24
SURPLUS					
Debentures paid	141,000.00	8,391.23	26,852.27	8,639.81	6,432.47
Local sinking fund					
Operating surplus	169,036.87	6,988.09	20,233.25	11,275.39	2,646.85
Total surplus	310,036.87	15,379.32	47,085.52	19,915.20	9,079.32
Total liabilities, reserves and surplus	526,909.68	35,816.84	141,128.36	66,881.19	19,514.88
Percentage of net debt to total assets	0.9	27.7	12.7	60.1	6.1

"A"—Continued

Hydro Municipalities as at December 31, 1936

Port Perry 1,125	Priceville P.V.	Ripley 454	Rosseau 305	Shelburne 1,102	Southampton 1,321	Stayner 1,008	Sunderland P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
....	68.00	....	....	800.00	25.00	....	....
2,564.65	....	....	....	566.60	....	200.00	....
19,102.73	4,717.36	9,975.19	7,269.16	14,976.58	21,529.55	14,353.90	4,174.96
....	....	....	....	....	....	....	....
4,676.69	702.86	3,551.90	2,204.63	6,309.57	6,275.07	5,699.60	1,523.48
4,214.12	412.10	1,500.13	1,083.86	6,538.06	7,430.67	5,740.05	2,107.48
1,037.90	139.88	844.33	461.72	1,059.60	2,000.73	984.00	627.74
....	....	....	....	....	....	....	....
128.98	833.90	1,254.97	1,278.04	2,243.26	893.28	454.13	192.62
....	....	....	....	....	....	....	....
....	....	....	....	739.50	2,077.00	....	2,030.00
31,725.07	6,874.10	17,126.52	12,297.41	33,233.17	40,231.30	27,431.68	10,656.28
3,171.84	468.83	2,252.10	2,422.77	2,287.89	5,127.05	601.30	1,740.28
10,000.00	....	....	....	5,500.00	....	5,500.00	1,116.14
1,442.58	184.08	150.24	306.90	782.91	253.25	979.22	643.27
18.00	....	....	....	59.40	21.81	....	18.29
....	....	....	....	....	....	....	....
11,596.85	672.24	5,424.57	1,887.68	13,814.47	4,727.94	11,861.60	7,823.90
510.10	....	....	....	....	....	98.51	6.22
58,464.44	8,199.25	24,953.43	16,914.76	55,677.84	50,361.35	46,472.31	22,004.38
....	1,724.87	....	....	....	....	....	....
58,464.44	9,924.12	24,953.43	16,914.76	55,677.84	50,361.35	46,472.31	22,004.38
12,438.77	1,812.74	9,100.98	11,874.92	1,128.51	19,001.40	....	2,266.64
108.32	101.57	....	11.61	984.52	212.46	93.66	36.67
....	....	....	....	....	....	....	....
510.10	74.45	100.00	....	19.78	7.00	98.51	6.22
13,057.19	1,988.76	9,200.98	11,886.53	2,132.81	19,220.86	192.17	2,309.53
11,596.85	672.24	5,424.57	1,887.68	13,814.47	4,727.94	11,861.60	7,823.90
7,841.86	2,075.86	4,350.31	1,140.47	12,482.13	3,777.89	11,492.89	4,070.44
....	....	....	....	....	....	....	....
19,438.71	2,748.10	9,774.88	3,028.15	26,296.60	8,505.83	23,354.49	11,894.34
7,442.89	5,187.26	4,870.96	1,125.08	18,791.49	13,998.60	9,867.59	4,533.36
....	....	....	....	....	....	....	....
18,525.65	....	1,106.61	875.00	8,456.94	8,636.06	13,058.06	3,267.15
25,968.54	5,187.26	5,977.57	2,000.08	27,248.43	22,634.66	22,925.65	7,800.51
58,464.44	9,924.12	24,953.43	16,914.76	55,677.84	50,361.35	46,472.31	22,004.38
27.9	26.4	47.1	79.1	5.1	42.1	0.6	16.3

STATEMENT

Balance Sheets of Electrical Departments of

GEORGIAN BAY SYSTEM—Concluded

Municipality	Tara	Teeswater	Thornton	Tottenham	Uxbridge
Population	509	837	P.V.	539	1,451
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings					40.00
Substation equipment		330.31		358.50	2,657.65
Distribution system—overhead	11,185.11	17,157.22	6,478.82	8,191.22	13,561.59
Distribution system—underground					
Line transformers	2,292.77	4,805.35	1,015.06	1,256.38	4,076.22
Meters	1,804.33	3,517.78	912.23	2,109.02	4,869.76
Street light equipment, regular	2,602.39	1,488.82	381.95	466.26	1,387.46
Street light equipment, ornamental					
Miscellaneous construction expense	1,478.74	1,868.49	300.35	1,325.68	1,026.12
Steam or hydraulic plant					
Old plant		4,976.86		286.45	
Total plant	19,363.34	34,144.83	9,088.41	13,993.51	27,618.80
Bank and cash balance	2,396.81	2,209.22	32.05	284.61	2,780.93
Securities and investments		1,000.00			
Accounts receivable	305.13	149.46	201.22	852.00	1,287.25
Inventories	10.37	55.73			
Sinking fund on local debentures					
Equity in H-E.P.C. systems	6,176.73	8,742.34	2,447.86	7,693.92	12,256.65
Other assets				254.26	78.75
Total assets	28,252.38	46,301.58	11,769.54	23,078.30	44,022.38
Deficit	2,464.07		3,069.89	3,413.82	
Total	30,716.45	46,301.58	14,839.43	26,492.12	44,022.38
LIABILITIES					
Debenture balance	2,346.53	8,297.40	1,955.05	6,352.55	
Accounts payable	2,468.97	28.11	202.67	217.97	6.00
Bank overdraft					
Other liabilities		28.00		254.26	78.75
Total liabilities	4,815.50	8,353.51	2,157.72	6,824.78	84.75
RESERVES					
For equity in H-E.P.C. systems	6,176.73	8,742.34	2,447.86	7,693.92	12,256.65
For depreciation	6,570.75	6,342.38	4,688.90	5,358.87	5,625.03
Other reserves					
Total reserves	12,747.48	15,084.72	7,136.76	13,052.79	17,881.68
SURPLUS					
Debentures paid	13,153.47	19,702.60	5,544.95	6,614.55	16,207.59
Local sinking fund					
Operating surplus		3,160.75			9,848.36
Total surplus	13,153.47	22,863.35	5,544.95	6,614.55	26,055.95
Total liabilities, reserves and surplus	30,716.45	46,301.58	14,839.43	26,492.12	44,022.38
Percentage of net debt to total assets	21.8	22.2	23.1	44.4	0.3

"A"—Continued

Hydro Municipalities as at December 31, 1936

Victoria Harbor 1,077	Walkerton 2,428	Waubaushene P.V.	Wiarton 1,715	Windermere 153	Wingham 1,987	Woodville 390	GEORGIAN BAY SYSTEM SUMMARY
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
......	......	......	241.79	......	13,679.51	......	116,284.41
......	......	......	......	......	4,863.91	......	176,476.02
9,586.04	41,892.59	7,658.21	21,230.43	9,332.53	40,474.75	3,049.26	1,184,522.32
......	......	......	......	......	......	......	66,437.67
1,516.97	11,190.32	2,034.90	5,868.28	3,106.75	16,328.74	2,127.54	393,364.91
2,647.77	10,913.00	2,200.48	6,321.73	1,002.87	15,158.44	2,179.77	422,026.60
366.32	2,513.25	303.35	2,025.26	247.26	3,489.76	498.38	139,550.64
......	......	......	......	......	......	......	......
685.70	2,507.34	350.14	5,088.18	525.65	4,440.42	302.31	103,361.58
......	......	......	......	......	14,711.99	......	47,993.99
......	4,897.60	......	2,058.29	......	12,320.02	2,182.50	112,714.93
14,802.80	73,914.10	12,547.08	42,833.96	14,215.06	125,467.54	10,339.76	2,762,733.07
1,674.70	6,238.95	1,757.90	5,855.70	92.99	705.95	1,662.08	178,437.83
......	......	......	5,000.00	......	7,000.00	5,000.00	275,495.88
254.97	2,436.74	1,010.18	1,885.92	675.84	3,065.32	1,510.53	114,695.41
......	1,429.22	17.28	......	......	4,206.28	......	24,812.46
......	......	......	......	......	......	......	9,790.38
4,871.92	8,785.27	2,798.57	7,235.51	1,428.15	25,437.64	7,755.16	1,185,337.97
......	......	......	......	......	......	......	9,419.42
21,604.39	92,804.28	18,131.01	62,811.09	16,412.04	165,882.73	26,267.53	4,560,722.42
......	......	......	......	......	......	......	23,683.76
21,604.39	92,804.28	18,131.01	62,811.09	16,412.04	165,882.73	26,267.53	4,584,406.18
......	52,472.12	......	32,524.96	10,499.23	30,264.37	2,091.57	494,653.76
158.97	45.96	......	16.24	113.60	389.90	54.76	25,781.26
......	......	......	......	......	......	......	59.70
......	50.00	......	30.00	......	474.00	......	12,961.08
158.97	52,568.08	......	32,571.20	10,612.83	31,128.27	2,146.33	533,455.80
4,871.92	8,785.27	2,798.57	7,235.51	1,428.15	25,437.64	7,755.16	1,185,337.97
4,907.79	5,426.22	2,850.97	4,473.94	1,684.55	27,434.07	2,402.98	840,503.63
......	......	......	......	......	......	......	6,325.40
9,779.71	14,211.49	5,649.54	11,709.45	3,112.70	52,871.71	10,158.14	2,032,167.00
6,500.00	10,527.88	3,500.00	4,875.04	1,264.07	65,841.13	3,408.43	1,069,733.11
......	......	......	......	......	......	......	9,790.38
5,165.71	15,496.83	8,981.47	13,655.40	1,422.44	16,041.62	10,554.63	939,259.89
11,665.71	26,024.71	12,481.47	18,530.44	2,686.51	81,882.75	13,963.06	2,018,783.38
21,604.39	92,804.28	18,131.01	62,811.09	16,412.04	165,882.73	26,267.53	4,584,406.18
0.9	62.6	0.0	58.6	70.8	22.2	11.6	15.6

STATEMENT

Balance Sheets of Electrical Departments of

EASTERN ONTARIO SYSTEM

Municipality	Alexandria	Apple Hill P.V.	Athens	Bath	Belleville
Population	1,931		626	360	14,411
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	202.00	169.06			40,191.40
Substation equipment					2,338.65
Distribution system—overhead	28,269.44	2,935.47	14,154.45	5,895.78	113,521.65
Distribution system—underground					
Line transformers	8,496.99	1,288.37	1,980.47	1,021.65	26,294.92
Meters	7,061.45	1,097.16	2,815.62	707.55	59,383.59
Street light equipment, regular	2,224.20	421.12	698.90	554.37	19,337.81
Street light equipment, ornamental					
Miscellaneous construction expense	5,117.93	280.98	1,011.61	727.38	3,219.26
Steam or hydraulic plant					
Old plant	4,466.89	709.55			
Total plant	55,838.90	6,901.71	20,661.05	8,906.73	264,287.28
Bank and cash balance	3,132.84	1,140.49	116.01	2.34	15,174.18
Securities and investments	5,000.00		3,000.00		30,000.00
Accounts receivable	3,854.55	372.30	2,261.74		43,377.17
Inventories					8,803.66
Sinking fund on local debentures					
Equity in H-E.P.C. systems	22,921.75	2,334.83	3,878.02	1,142.63	103,439.14
Other assets					
Total assets	90,748.04	10,749.33	29,916.82	10,051.70	465,081.43
Deficit				237.99	
Total	90,748.04	10,749.33	29,916.82	10,289.69	465,081.43
LIABILITIES					
Debenture balance	12,085.39	2,322.99	10,096.63	6,566.01	
Accounts payable		395.47	86.98	714.06	66.56
Bank overdraft					
Other liabilities	436.76			64.00	9,229.08
Total liabilities	12,522.15	2,718.46	10,183.61	7,344.07	9,295.64
RESERVES					
For equity in H-E.P.C. systems	22,921.75	2,334.83	3,878.02	1,142.63	103,439.14
For depreciation	14,598.76	1,845.26	3,393.75	869.00	32,748.19
Other reserves	377.83		6.06		1,172.36
Total reserves	37,898.34	4,180.09	7,277.83	2,011.63	137,359.69
SURPLUS					
Debentures paid	36,048.45	3,677.01	3,903.37	933.99	176,000.00
Local sinking fund					
Operating surplus	4,279.10	173.77	8,552.01		142,426.10
Total surplus	40,327.55	3,850.78	12,455.38	933.99	318,426.10
Total liabilities, reserves and surplus	90,748.04	10,749.33	29,916.82	10,289.69	465,081.43
Percentage of net debt to total assets	18.4	32.3	39.1	82.4	2.6

"A"—Continued

Hydro Municipalities as at December 31, 1936

Bloomfield 669	Bowmanville 3,631	Brighton 1,374	Brockville 9,874	Cardinal 1,148	Carleton Place 4,250	Chesterville 1,074	Cobden 641
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
	27,907.29		45,295.14		13,378.33	300.00	
410.00	894.47		1,000.87		2,471.63		
11,141.43	46,570.65	14,725.81	89,232.80	12,343.25	43,248.55	8,232.57	3,815.00
2,230.77	8,535.70	5,056.89	38,436.71	2,850.50	11,441.62	3,461.50	560.00
2,780.23	17,649.96	6,848.77	44,875.56	2,922.82	17,227.95	4,185.17	780.00
908.20	2,921.51	821.98	24,685.09	438.57	6,699.55	593.64	412.00
1,403.42	3,001.82	770.78	3,057.92	938.43	3,932.86	911.38	45.86
			46,965.86				
			4,821.76	3,474.80	5,293.19		2,853.85
18,874.05	107,481.40	28,224.23	298,371.71	22,968.37	103,693.68	17,684.26	8,466.71
2,859.70	100.00	4,735.17	7,310.67	375.35		735.96	2,388.27
			115,000.00	3,000.00	20,000.00	9,000.00	
359.49	12,654.99	3,928.52	13,920.90	522.35	10,207.45	2,046.05	314.89
	3,498.26	4,733.68	2,512.77		523.39	530.51	
3,929.41	29,851.04	6,834.62	121,243.08	2,865.12	55,152.56	21,057.91	138.85
26,022.65	153,585.69	48,456.22	558,359.13	29,731.19	189,577.08	51,054.69	11,308.72
26,022.65	153,585.69	48,456.22	558,359.13	29,731.19	189,577.08	51,054.69	11,308.72
5,839.43	34,565.36	19,753.03		11,176.11	35,509.81	486.14	6,913.79
			8,262.43			27.69	11.90
	6,765.76				1,280.63		
61.00	1,023.89	131.78	48.40		931.90		70.00
5,900.43	42,355.01	19,884.81	8,310.83	11,176.11	37,722.34	513.83	6,995.69
3,929.41	29,851.04	6,834.62	121,243.08	2,865.12	55,152.56	21,057.91	138.85
5,553.96	8,177.50	2,800.53	91,905.15	2,005.80	12,129.23	6,290.01	226.00
		886.76	15,528.77		1,683.17		
9,483.37	38,028.54	10,521.91	228,677.00	4,870.92	68,964.96	27,347.92	364.85
5,360.57	36,434.64	5,246.97	226,657.54	3,823.89	30,490.19	6,013.86	889.48
5,278.28	36,767.50	12,802.53	94,713.76	9,860.27	52,399.59	17,179.08	3,058.70
10,638.85	73,202.14	18,049.50	321,371.30	13,684.16	82,889.78	23,192.94	3,948.18
26,022.65	153,585.69	48,456.22	558,359.13	29,731.19	189,577.08	51,054.69	11,308.72
26.7	34.2	47.8	1.9	41.6	28.1	1.7	62.6

STATEMENT

Balance Sheets of Electrical Departments of

EASTERN ONTARIO SYSTEM—Continued

Municipality	Cobourg	Colborne	Deseronto	Finch	Hastings
Population	5,837	986	1,363	368	817
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	18,563.19				
Substation equipment	1,668.35		161.18		
Distribution system—overhead	69,352.84	10,106.73	10,310.90	7,669.04	15,662.47
Distribution system—underground					
Line transformers	20,223.20	1,117.89	1,702.57	1,393.35	1,995.63
Meters	26,133.97	2,015.98	4,807.54	1,798.27	3,209.26
Street light equipment, regular	9,317.40	1,399.56	432.60	435.62	1,249.95
Street light equipment, ornamental					
Miscellaneous construction expense	3,956.04	2,396.06	427.19	144.02	688.76
Steam or hydraulic plant					
Old plant					1,733.13
Total plant	149,214.99	17,036.22	17,841.98	11,440.30	24,539.20
Bank and cash balance	290.06	2,468.81	1,333.66	515.19	630.35
Securities and investments	22,580.31	2,500.00		3,000.00	5,500.00
Accounts receivable	6,845.95	611.80	1,918.25	638.72	475.06
Inventories	3,253.34	809.44	886.34		
Sinking fund on local debentures					
Equity in H-E.P.C. systems	22,327.76	1,663.01	3,975.65	2,777.41	1,961.00
Other assets					
Total assets	204.512.41	25,089.28	25,955.88	18,371.62	33,105.61
Deficit					
Total	204,512.41	25,089.28	25,955.88	18,371.62	33,105.61
LIABILITIES					
Debenture balance	91,860.88	11,304.19	4,746.36	4,813.30	17,638.70
Accounts payable	105.69			13.45	145.51
Bank overdraft					
Other liabilities	4,037.13	209.00	219.12	5.00	118.00
Total liabilities	96,003.70	11,513.19	4,965.48	4,831.75	17,902.21
RESERVES					
For equity in H-E.P.C. systems	22,327.76	1,663.01	3,975.65	2,777.41	1,961.00
For depreciation	11,514.12	984.00	2,084.92	1,810.23	2,421.35
Other reserves				10.59	
Total reserves	33,841.88	2,647.01	6,060.57	4,598.23	4,382.35
SURPLUS					
Debentures paid	14,132.62	890.40	10,253.64	2,186.70	3,361.30
Local sinking fund					
Operating surplus	60,534.21	10,038.68	4,676.19	6,754.94	7,459.75
Total surplus	74,666.83	10,929.08	14,929.83	8,941.64	10,821.05
Total liabilities, reserves and surplus	204,512.41	25,089.28	25,955.88	18,371.62	33,105.61
Percentage of net debt to total assets	53.1	49.1	22.6	30.9	57.5

"A"—Continued

Hydro Municipalities as at December 31, 1936

Havelock 1,161	Kemptville 1,330	Kingston 24,173	Lakefield 1,374	Lanark 673	Lancaster 602	Lindsay 6,949
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		206,243.61	3,137.97			10,556.68
572.90		51,735.17				3,176.56
19,628.24	20,581.55	170,670.20	22,145.89	6,741.97	6,455.81	82,089.73
		180,399.12				
2,516.33	6,405.31	60,693.38	5,556.69	1,267.23	1,044.32	24,197.43
5,423.62	6,955.58	105,783.41	7,250.20	1,881.42	1,571.15	31,524.86
1,883.33	1,063.16	75,300.28	1,850.38	682.38	650.65	10,311.90
4,600.29	5,852.88	43,220.42	3,657.66	376.08	1,068.55	2,529.29
		15,890.14				
2,420.45			3,445.25			
37,045.16	40,858.48	909,935.73	47,044.04	10,949.08	10,790.48	164,386.45
2,763.30	2,056.98	23,287.60	2,641.76	696.78	4,130.32	10,388.34
10,000.00	20,000.00	292,175.00	8,000.00	2,982.05		55,000.00
519.89	1,842.66	58,353.79	1,378.41	286.57	1,026.38	7,133.54
	1,158.18	6,834.49				344.26
		18,451.66				
8,281.25	14,175.21		7,960.37	4,352.54	4,551.23	57,816.29
		1,000.00				
58,609.60	80,091.51	1,310,038.27	67,024.58	19,267.02	20,498.41	295,068.88
58,609.60	80,091.51	1,310,038.27	67,024.58	19,267.02	20,498.41	295,068.88
10,445.72	16,881.83	62,530.01	23,123.60	1,866.68	897.69	92,457.36
	171.18	1,120.00			470.23	
	139.05	2,668.07	621.02	15.00	123.36	2,212.56
10,445.72	17,192.06	66,318.08	23,744.62	1,881.68	1,491.28	94,669.92
8,281.25	14,175.21		7,960.37	4,352.54	4,551.23	57,816.29
9,030.31	9,522.83	177,879.77	12,724.33	2,607.25	3,280.70	27,086.81
		296,922.75				
17,311.56	23,698.04	474,802.52	20,684.70	6,959.79	7,831.93	84,903.10
22,454.28	8,118.17	249,369.99	10,376.40	5,694.79	9,072.73	37,542.64
		18,451.66				
8,398.04	31,083.24	501,096.02	12,218.86	4,730.76	2,102.47	77,953.22
30,852.32	39,201.41	768,917.67	22,595.26	10,425.55	11,175.20	115,495.86
58,609.60	80,091.51	1,310,038.27	67,024.58	19,267.02	20,498.41	295,068.88
20.8	26.1	3.7	40.2	12.6	9.3	39.9

STATEMENT

Balance Sheets of Electrical Departments of

EASTERN ONTARIO SYSTEM—Continued

Municipality	Madoc	Marmora	Martin-town P.V.	Maxville	Napanee
Population	1,253	986		699	3,013
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	100.00		126.15		2,634.47
Substation equipment				407.79	
Distribution system—overhead	11,252.83	13,532.44	2,746.79	11,549.05	42,507.03
Distribution system—underground					
Line transformers	3,271.56	3,604.81	690.33	1,781.21	9,354.57
Meters	4,966.98	3,725.64	901.05	2,443.99	17,433.29
Street light equipment, regular	1,577.14	1,193.23	335.26	1,605.64	3,963.21
Street light equipment, ornamental					
Miscellaneous construction expense	338.55	2,086.41	751.81	2,381.00	3,793.23
Steam or hydraulic plant					
Old plant		573.62			
Total plant	21,507.06	24,716.15	5,551.39	20,168.68	79,685.80
Bank and cash balance	5,639.06	3,494.17	1,781.59	511.31	5,109.53
Securities and investments		352.68		1,000.00	
Accounts receivable	253.70	384.71	188.91	1,009.29	12,742.05
Inventories					5,994.08
Sinking fund on local debentures					
Equity in H-E.P.C. systems	4,481.84	3,487.74	1,461.63	6,881.25	25,302.36
Other assets					
Total assets	31,881.66	32,435.45	8,983.52	29,570.53	128,833.82
Deficit			187.82		
Total	31,881.66	32,435.45	9,171.34	29,570.53	128,833.82
LIABILITIES					
Debenture balance		5,280.10		4,692.93	19,408.50
Accounts payable		170.74		11.15	
Bank overdraft					
Other liabilities	213.00	45.00	5.00	75.00	610.75
Total liabilities	213.00	5,495.84	5.00	4,779.08	20,019.25
RESERVES					
For equity in H-E.P.C. systems	4,481.84	3,487.74	1,461.63	6,881.25	25,302.36
For depreciation	594.09	3,842.62	1,592.37	4,723.02	6,303.45
Other reserves			112.34		3,018.02
Total reserves	5,075.93	7,330.36	3,166.34	11,604.27	34,623.83
SURPLUS					
Debentures paid	14,000.00	12,386.01	6,000.00	11,307.07	50,591.50
Local sinking fund					
Operating surplus	12,592.73	7,223.24		1,880.11	23,599.24
Total surplus	26,592.73	19,609.25	6,000.00	13,187.18	74,190.74
Total liabilities, reserves and surplus	31,881.66	32,435.45	9,171.34	29,570.53	128,833.82
Percentage of net debt to total assets	0.8	18.9	0.0	21.6	19.3

"A"—Continued

Hydro Municipalities as at December 31, 1936

Norwood	Omemee	Oshawa	Ottawa	Perth	Peterborough	Picton
753	588	24,097	140,316	4,215	22,973	3,560
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
		60,448.11	434,311.44	5,026.01	75,202.75	10,868.37
457.53	360.32	1,393.29	705,083.19	5,779.83	91,649.67	2,004.66
23,290.92	11,601.34	196,067.39	779,138.72	46,758.25	243,415.28	39,171.27
			174,681.19			
3,879.18	2,980.81	48,616.94	334,643.40	24,220.65	106,225.27	12,652.58
4,822.00	2,508.72	106,667.36	286,888.97	22,204.81	99,111.53	16,935.85
1,886.92	701.06	16,088.95	123,719.11	4,167.14	56,485.00	4,275.67
4,148.70	1,575.92	11,125.43	36,615.49	5,373.85	54,655.69	3,385.43
2,447.51		8,831.65		23,606.94	29,771.74	
40,932.76	19,728.17	449,239.12	2,875.081.51	137,137.48	756,516.93	89,293.83
5,281.07	4,685.12	52,794.24	153,113.83	13,411.98	330.00	8,404.17
10,000.00			38,000.00	48,574.23		14,000.00
430.04	48.39	58,341.05	90.528.82	5,905.52	55,246.99	5,295.89
		8,268.50	26,503.30	7,779.09	6,455.63	4,491.08
			500,654.33		298,448.53	
4,026.51		316,187.34	101,022.15	48,123.32	189,039.95	33,423.96
		1,000.87		82.03		
60,670.38	24,461.68	885,831.12	3,784,903.94	261,013.65	1,306,038.03	154,908.93
60,670.38	24,461.68	885,831.12	3,784,903.94	261,013.65	1,306,038.03	154,908.93
24,297.94	1,438.02	213,227.65	651,558.87	45,928.41	527,920.00	
		5,846.01	51,861.27		19,766.69	3,493.23
					8,804.27	
358.07	102.84	23,273.18		2,404.26	185.00	1,882.30
24,656.01	1,540.86	242,346.84	703,420.14	48,332.67	556,675.96	5,375.53
4,026.51		316,187.34	101,022.15	48,123.32	189,039.95	33,423.96
11,281.18	7,612.43	64,779.05	1,097,734.36	43,559.33	110,220.33	15,475.28
		17,678.24	167,556.37	600.00	1,357.18	1,386.53
15,307.69	7,612.43	398,644.63	1,366,312.88	92,282.65	300,617.46	50,285.77
12,802.06	10,561.98	96,772.35	328,441.13	62,471.59		5,730.32
			500,654.33		298,448.53	
7,904.62	4,746.41	148,067.30	886,075.46	57,926.74	150,296.08	93,517.31
20,706.68	15,308.39	244,839.65	1,715,170.92	120,398.33	448,744.61	99,247.63
60,670.38	24,461.68	885,831.12	3,784,903.94	261,013.65	1,306,038.03	154,908.93
43.5	6.3	42.5	6.4	22.7	31.5	4.4

STATEMENT

Balance Sheets of Electrical Departments of

EASTERN ONTARIO SYSTEM—Continued

Municipality	Port Hope	Prescott	Richmond	Russell	Smiths Falls
Population	4,320	2,942	420	P.V.	7,539
ASSETS	$ c.	$ c.	$ c.	$ c.	$ c.
Lands and buildings	8,673.09	2,761.54			19,528.85
Substation equipment					4,745.66
Distribution system—overhead	49,272.27	39,536.16	6,392.59	7,769.63	87,549.92
Distribution system—underground					
Line transformers	14,014.49	14,419.16	984.28	1,382.48	27,963.30
Meters	20,409.10	18,909.92	1,256.17	1,627.91	33,574.24
Street light equipment, regular	2,828.46	2,116.94	173.98	492.87	9,326.13
Street light equipment, ornamental					
Miscellaneous construction expense	1,367.87	299.14	642.54	1,277.96	7,021.74
Steam or hydraulic plant					37,286.49
Old plant					21,253.48
Total plant	96,565.28	78,042.86	9,449.56	12,550.85	248,249.81
Bank and cash balance	18,224.98	7,639.57	893.51	447.13	10,002.65
Securities and investments		3,000.00		2,000.00	48,000.00
Accounts receivable	4,424.26	3,623.17	281.23	1,528.44	7,575.74
Inventories	1,717.61				118.29
Sinking fund on local debentures					
Equity in H-E.P.C. systems	31,994.72	34,489.40	1,686.00	3,958.02	71,051.99
Other assets					
Total assets	152,926.85	126,795.00	12,310.30	20,484.44	384,998.48
Deficit					
Total	152,926.85	126,795.00	12,310.30	20,484.44	384,998.48
LIABILITIES					
Debenture balance			4,751.27	5,817.55	27,898.19
Accounts payable		481.31		47.76	80.62
Bank overdraft					
Other liabilities	3,913.53	211.00	45.25		75.00
Total liabilities	3,913.53	692.31	4,796.52	5,865.31	28,053.81
RESERVES					
For equity in H-E.P.C. systems	31,994.72	34,489.40	1,686.00	3,958.02	71,051.99
For depreciation	10,562.36	37,997.52	1,475.92	2,118.59	75,850.50
Other reserves			52.84		1,339.91
Total reserves	42,557.08	72,486.92	3,214.76	6,076.61	148,242.40
SURPLUS					
Debentures paid	79,000.00	12,170.99	1,748.73	4,182.45	169,726.81
Local sinking fund					
Operating surplus	27,456.24	41,444.78	2,550.29	4,360.07	38,975.46
Total surplus	106,456.24	53,615.77	4,299.02	8,542.52	208,702.27
Total liabilities, reserves and surplus	152,926.85	126,795.00	12,310.30	20,484.44	384,998.48
Percentage of net debt to total assets	3.2	0.7	45.1	35.5	8.9

"A"—Continued

Hydro Municipalities as at December 31, 1936

Stirling 965	Trenton 6,541	Tweed 1,276	Warkworth P.V.	Wellington 920	Westport 709	Whitby 3,751	Williamsburg P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
8,410.00	5,114.41			200.00		6,394.26	
7,042.12	23,080.03			499.80		34,493.60	
6,111.39	98,930.87	10,693.87	5,524.02	14,660.44	7,277.12	45,917.93	3,373.77
3,711.12	21,616.60	3,314.91	716.39	3,716.70	1,015.48	11,043.22	1,959.82
5,094.44	27,614.74	5,117.05	1,659.89	5,424.12	1,323.44	15,923.46	2,292.46
2,732.21	13,537.82	1,035.28	325.70	1,225.88	581.82	4,568.27	152.11
653.10	6,195.75	293.54	609.19	795.70	1,280.96	6,550.63	318.58
			3,618.02	2,477.92	1,713.00	1,340.13	
33,754.38	196,090.22	20,454.65	12,453.21	29,000.56	13,191.82	126,231.50	8,096.74
6,403.54	14,868.17	775.16	1,697.46	10.00	263.51	14,749.26	3,721.14
3,424.88			2,500.00	5,000.00	2,500.00	5,000.00	16,000.00
976.25	9,705.17	1,741.54	303.08	869.62	877.79	8,603.09	1,663.25
920.26	6,129.42	2,007.81				165.98	
5,345.24	39,770.21	5,133.64	2,443.50	6,410.42	2,437.80	32,290.41	4,191.66
					80.00		
50,824.55	266,563.19	30,112.80	19,397.25	41,290.60	19,350.92	187,040.24	33,672.79
50,824.55	266,563.19	30,112.80	19,397.25	41,290.60	19,350.92	187,040.24	33,672.79
	80,327.94	8,477.92	8,652.74	8,887.70	11,864.24	29,301.57	
						129.48	1,788.14
				1,336.45			
254.13	3,731.85	286.69		21.00		924.43	453.02
254.13	84,059.79	8,764.61	8,652.74	10,245.15	11,864.24	30,355.48	2,241.16
5,345.24	39,770.21	5,133.64	2,443.50	6,410.42	2,437.80	32,290.41	4,191.66
5,589.61	18,866.25	3,049.97	1,956.32	7,302.54	874.56	24,756.36	2,415.72
		50.00					297.20
10,934.85	58,636.46	8,233.61	4,399.82	13,712.96	3,312.36	57,046.77	6,904.58
10,000.00	84,672.06	10,522.08	2,347.26	8,112.30	3,135.76	47,310.93	2,750.00
29,635.57	39,194.88	2,592.50	3,997.43	9,220.19	1,038.56	52,327.06	21,777.05
39,635.57	123,866.94	13,114.58	6,344.69	17,332.49	4,174.32	99,637.99	24,527.05
50,824.55	266,563.19	30,112.80	19,397.25	41,290.60	19,350.92	187,040.24	33,672.79
0.6	37.1	35.1	51.0	29.4	70.1	19.6	7.6

STATEMENT

Balance Sheets of Electrical Departments of

	EASTERN ONTARIO SYSTEM—Concluded		THUNDER BAY SYSTEM	
Municipality	Winchester	EASTERN ONTARIO SYSTEM SUMMARY	Fort William	Nipigon
Population	1,057		24,371	
ASSETS	$ c.	$ c.	$ c.	$ c.
Lands and buildings	299.85	1,006,043.97	48,927.62	215.03
Substation equipment		941,427.27	123,549.33	
Distribution system—overhead	9,724.18	2,649,267.69	150,943.94	13,938.94
Distribution system—underground		355,080.31		
Line transformers	3,107.53	900,656.21	67,673.04	2,594.47
Meters	5,149.25	1,080,677.47	64,947.51	2,616.83
Street light equipment, regular	719.87	421,109.82	35,134.33	1,452.86
Street light equipment, ornamental				
Miscellaneous construction expense	516.22	247,391.30	6,384.04	133.53
Steam or hydraulic plant		100,142.49		
Old plant	1,100.00	125,952.88	293,762.46	
Plant not distributed				
Total plant	20,616.90	7,827,749.41	791,322.27	20,951.66
Bank and cash balance	2,362.82	425,889.10	59,096.65	3,571.95
Securities and investments	7,000.00	813,089.15	58,200.00	732.02
Accounts receivable	1,286.79	448,686.20	30,066.91	404.22
Inventories		104,439.37	1,213.07	
Sinking fund on local debentures		817,554.52	93,425.70	
Equity in H-E.P.C. systems	14,372.01	1,493,643.75	379,377.22	2,536.28
Other assets		2,162.90		
Total assets	45,638.52	11,933,214.40	1,412,701.82	28,196.13
Deficit		425.81		
Total	45,638.52	11,933,640.21	1,412,701.82	28,196.13
LIABILITIES				
Debenture balance	4,804.20	2,168,416.75	300,000.00	5,413.96
Accounts payable	6.87	95,274.42	16,405.35	237.85
Bank overdraft		18,187.11		
Other liabilities	467.87	61,902.29	21,833.60	
Total liabilities	5,278.94	2,343,780.57	338,238.95	5,651.81
RESERVES				
For equity in H-E.P.C. systems	14,372.01	1,493,643.75	379,377.22	2,536.28
For depreciation	7,229.71	2,011,253.20	104,142.29	4,575.00
Other reserves		510,036.92	17,882.33	
Total reserves	21,601.72	4,014,933.87	501,401.84	7,111.28
SURPLUS				
Debentures paid	5,845.80	1,961,522.80	367,650.00	4,586.04
Local sinking fund		817,554.52	93,425.70	
Operating surplus	12,912.06	2,795,848.45	111,985.33	10,847.00
Total surplus	18,757.86	5,574,925.77	573,061.03	15,433.04
Total liabilities, reserves and surplus	45,638.52	11,933,640.21	1,412,701.82	28,196.13
Percentage of net debt to total assets	16.9	15.9	26.0	22.0

"A"—Concluded

Hydro Municipalities as at December 31, 1936

Port Arthur 20,352	THUNDER BAY SYSTEM SUMMARY	NORTHERN ONTARIO PROPERTIES—SUDBURY DISTRICT Capreol 1,750	Sudbury 20,079	SUDBURY DISTRICT SUMMARY	ALL SYSTEMS GRAND SUMMARY
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
429,107.94	478,250.59	450.00	26,000.00	26,450.00	10,528,595.34
240,640.36	364,189.69	9,527.32	35,000.00	44,527.32	22,162,208.03
459,923.46	624,806.34	11,918.59	269,145.15	281,063.74	22,163,701.17
					6,070,337.02
70,801.13	141,068.64	3,099.39	51,743.43	54,842.82	9,845,939.94
88,197.53	155,761.87	4,605.65	72,465.85	77,071.50	9,043,615.65
77,655.27	114,242.46	818.96	63,924.98	64,743.94	2,527,188.03
					1,504,596.77
32,404.48	38,922.05	864.60	5,524.77	6,389.37	4,019,430.59
324,027.37	324,027.37	....	....	....	496,186.33
....	293,762.46	....	....	....	4,876,405.43
....	....	....	....	....	200,000.00
1,722,757.54	2,535,031.47	31,284.51	523,804.18	555,088.69	93,438,204.30
63,246.95	125,915.55	676.62	63,291.41	63,968.03	3,921,121.28
737,044.69	795,976.71	....	....	....	2,924,913.30
164,811.34	195,282.47	826.36	24,221.66	25,048.02	4,560,713.55
16,318.94	17,532.01	44.66	7,762.33	7,806.99	1,261,843.81
133,130.18	226,555.88	....	....	....	9,535,712.83
1,270,558.91	1,652,472.41	....	....	....	36,193,874.21
441.40	441.40	85.00	19,982.53	20,067.53	203,167.35
4,108,309.95	5,549,207.90	32,917.15	639,062.11	671,979.26	152,039,550.63
....	....	....	....	....	26,865.94
4,108,309.95	5,549,207.90	32,917.15	639,062.11	671,979.26	152,066,416.57
184,718.40	490,132.36	4,488.61	197,767.70	202,256.31	34,485,507.43
55,295.43	71,938.63	9,796.88	46,290.74	56,087.62	2,879,497.45
....	....	....	....	....	25,559.95
750.45	22,584.05	85.00	19,982.53	20,067.53	3,267,141.59
240,764.28	584,655.04	14,370.49	264,040.97	278,411.46	40,657,706.42
1,270,558.91	1,652,472.41	....	....	....	36,193,874.21
527,501.02	636,218.31	1,181.00	17,581.75	18,762.75	19,666,170.18
73,257.92	91,140.25	....	10,480.54	10,480.54	2,763,100.40
1,871,317.85	2,379,830.97	1,181.00	28,062.29	29,243.29	58,623,144.79
457,381.60	829,617.64	14,511.39	269,570.83	284,082.22	26,084,294.84
133,130.18	226,555.88	....	....	....	9,535,712.83
1,405,716.04	1,528,548.37	2,854.27	77,388.02	80,242.29	17,165,557.69
1,996,227.82	2,584,721.89	17,365.66	346,958.85	364,324.51	52,785,565.36
4,108,309.95	5,549.207.90	32,917.15	639,062.11	671,979.26	152,066,416.57
3.9	9.8	43.7	41.3	41.4	28.3

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM

Municipality Population	Acton 1,957	Agincourt P.V.	Ailsa Craig 452	Alvinston 607	Amherstburg 2,670
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	11,070.82	4,643.07	2,375.12	4,122.99	20,132.19
Commercial light service	4,712.30	1,206.03	1,517.17	2,485.79	6,685.17
Commercial power service	23,535.17	1,559.21	1,304.46	605.72	6,680.79
Municipal power	664.70				
Street lighting	1,876.83	736.00	638.00	1,854.00	2,379.96
Merchandise	186.52				
Miscellaneous	453.40	193.38	273.95	594.72	202.31
Total earnings	42,499.74	8,337.69	6,108.70	9,663.22	36,080.42
EXPENSES					
Power purchased	32,663.39	5,572.30	4,470.65	5,725.57	21,937.04
Substation operation					
Substation maintenance					
Distribution system, operation and maintenance	1,932.95	138.58	154.20	260.66	1,449.74
Line transformer maintenance	128.30	12.50			41.47
Meter maintenance	205.21	303.95	4.20	39.60	289.33
Consumers' premises expenses					169.33
Street lighting, operation and maintenance	415.08	27.21	64.10	95.33	400.04
Promotion of business	107.35				
Billing and collecting	656.99		238.03	235.77	2,035.72
General office, salaries and expenses	609.23	401.57	56.95	95.25	1,174.34
Undistributed expenses	141.23		29.47	24.81	92.64
Truck operation and maintenance	210.14				357.93
Interest		142.28		559.72	1,029.55
Sinking fund and principal payments on debentures		684.18		1,231.05	1,532.34
Depreciation	1,408.00	408.00	459.00	663.00	2,070.00
Other reserves					
Total operating costs and fixed charges	38,477.87	7,690.57	5,476.60	8,930.76	32,579.47
Net surplus	4,021.87	647.12	632.10	732.46	3,500.95
Net loss					
NUMBER OF CONSUMERS					
Domestic service	489	152	132	154	620
Commercial light service	91	26	39	52	119
Power service	15	3	2	2	15
Total	595	181	173	208	754

"B"

Hydro Municipalities for Year Ended December 31, 1936

Ancaster Twp.	Arkona 408	Aylmer 1,992	Ayr 763	Baden P.V.	Beachville P.V.	Belle River 705	Blenheim 1,740
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
9,026.18	2,786.01	10,558.95	5,369.52	4,004.31	3,106.21	3,862.65	9,165.05
1,740.19	1,776.66	6,924.88	1,871.66	1,711.19	533.75	1,809.65	6,749.75
184.69	189.05	3,082.65	402.69	5,548.21	10,217.79	68.83	3,026.80
300.76		1,013.55				1,178.19	1,866.51
1,054.00	1,000.00	2,427.49	1,028.00	621.00	517.00	936.00	2,512.00
	13.44	1,238.85	14.54	106.04	194.95	153.53	166.37
12,305.82	5,765.16	25,246.37	8,686.41	11,990.75	14,569.70	8,008.85	23,486.48
7,668.72	3,419.70	16,015.89	5,501.82	9,973.61	12,666.08	4,944.10	13,518.05
904.78	130.15	1,501.50	611.77	198.84	102.93	209.61	755.68
43.95		45.75	4.45	45.06	1.50	140.32	51.03
273.61	68.22	343.78	81.73	105.01	41.49	162.27	404.39
				0.50			322.50
142.23	36.01	279.85	111.55	147.94	67.78	103.79	525.19
		137.67			11.75		
990.97	160.28	727.06	355.06	452.68	313.88	372.45	886.99
505.98	72.25	728.51	36.74	97.06	138.52	375.33	1,073.73
62.75	25.85	43.18	54.30	48.84	4.55	32.42	40.95
472.14	546.45	1,012.90	311.35	82.55	99.28	276.17	454.16
346.70	661.34	1,504.81	404.75	242.71	258.51	464.96	567.92
948.00	350.00	1,528.00	607.00	433.00	667.00	755.00	1,498.00
							65.76
12,359.83	5,470.25	23,868.90	8,080.52	11,827.80	14,373.27	7,836.42	20,164.35
	294.91	1,377.47	605.89	162.95	196.43	172.43	3,322.13
54.01							
279	100	663	211	144	137	214	512
39	36	144	47	38	22	40	124
5	2	9	4	3	4	2	13
323	138	816	262	185	163	256	649

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Blyth	Bolton	Bothwell	Brampton	Brantford
Population	632	559	697	5,447	31,212
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	3,476.05	3,884.52	2,697.41	39,823.65	185,955.84
Commercial light service	1,673.22	970.74	1,404.70	16,705.80	69,989.55
Commercial power service	645.55	2,396.87	746.94	17,674.35	208,850.21
Municipal power			151.84	1,993.11	25,366.65
Street lighting	1,300.00	1,078.24	1,293.00	5,514.50	32,904.95
Merchandise					
Miscellaneous	10.30	51.39	597.27	1,360.09	5,598.65
Total earnings	7,105.12	8,381.76	6,891.16	83,071.50	528,665.85
EXPENSES					
Power purchased	4,358.80	4,898.66	4,728.22	65,813.70	364,498.20
Substation operation					7,889.53
Substation maintenance				271.82	461.32
Distribution system, operation and maintenance	189.19	377.75	73.21	3,636.04	13,773.32
Line transformer maintenance				285.92	597.68
Meter maintenance	71.80		78.42	361.03	4,075.54
Consumers' premises expenses					1,215.41
Street lighting, operation and maintenance	124.58	69.28	147.43	425.83	4,716.16
Promotion of business		70.49			451.11
Billing and collecting	151.61		224.43	1,481.18	11,320.64
General office, salaries and expenses	84.06	525.73	141.30	1,624.86	10,247.95
Undistributed expenses	105.16		2.24	184.71	2,579.43
Truck operation and maintenance				268.46	1,952.76
Interest	376.39	245.18	160.42	400.41	9,048.86
Sinking fund and principal payments on debentures	1,155.53	623.83	202.83	2,080.12	56,933.63
Depreciation	485.00	610.00	601.00	4,899.00	24,451.00
Other reserves				140.00	3,000.00
Total operating costs and fixed charges	7,102.12	7,420.92	6,359.50	81,873.08	517,212.54
Net surplus	3.00	960.84	531.66	1,198.42	11,453.31
Net loss					
NUMBER OF CONSUMERS					
Domestic service	170	165	175	1,404	7,531
Commercial light service	53	36	50	241	1,150
Power service	4	9	7	52	212
Total	227	210	232	1,697	8,893

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Brantford Twp.	Bridgeport P.V.	Brigden P.V.	Brussels 775	Burford P.V.	Burgess-ville P.V.	Caledonia 1,351	Campbell-ville P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
20,934.07	4,105.84	2,316.33	5,142.50	4,041.51	1,386.19	5,823.38	1,385.19
4,235.00	838.84	1,904.71	2,681.71	1,098.97	660.12	4,037.34	481.09
3,027.14	322.23	686.17	761.23	1,455.34	23.21	2,296.42	
4,092.00	654.00	789.00	1,296.00	670.08	312.00	1,749.46	480.00
681.56	14.41	164.42	166.96	233.30		309.46	54.04
32,969.77	5,935.32	5,860.63	10,048.40	7,499.20	2,381.52	14,216.06	2,400.32
18,220.52	3,814.62	3,759.48	5,472.20	5,028.48	1,696.68	8,400.29	1,521.01
467.84	12.89	336.81	366.11	133.48	42.57	1,627.25	9.02
21.89	1.17	73.75			11.85	242.90	
246.21		57.48	139.39	99.18		353.96	
0.40							
634.79	113.11	107.43	181.67	65.01	43.78	362.23	13.50
1,777.75	257.75	356.04		418.49	61.30	664.78	
1,709.44	93.11	123.73	493.31	100.15	39.35	390.49	91.22
10.26	15.23	24.10	12.17	17.13	0.65	48.97	
894.83	534.12	17.60	612.29		30.79	91.81	182.21
3,910.96	670.23	317.11	1,145.05			286.40	306.32
2,686.00	571.00	391.00	638.00	519.00	218.00	760.00	129.00
25.00							
30,605.89	6,083.23	5,564.53	9,060.19	6,380.92	2,144.97	13,229.08	2,252.28
2,363.88		296.10	988.21	1,118.28	236.55	986.98	148.04
	147.91						
865	132	110	224	187	52	379	46
53	18	43	65	30	18	90	9
5	4	5	2	2	1	7	
923	154	158	291	219	71	476	55

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA
SYSTEM—Continued

Municipality	Cayuga	Chatham	Chippawa	Clifford	Clinton
Population	700	15,957	1,195	423	1,873
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	3,702.14	86,112.09	7,904.93	2,314.12	12,134.92
Commercial light service	3,198.68	73,314.01	1,934.56	1,642.52	6,538.51
Commercial power service	1,088.27	56,398.94	171.66	389.19	4,156.07
Municipal power		6,856.57	1,141.08		967.78
Street lighting	1,441.50	19,241.60	1,295.65	846.48	2,014.86
Merchandise		532.93			574.86
Miscellaneous	34.14	3,191.92	100.63	16.96	1,162.87
Total earnings	9,464.73	245,648.06	12,548.51	5,209.27	27,549.87
EXPENSES					
Power purchased	4,841.45	132,371.12	6,218.91	3,543.81	15,509.06
Substation operation		7,047.27			125.08
Substation maintenance		1,721.91			
Distribution system, operation and maintenance	239.89	3,736.69	897.30	119.78	547.35
Line transformer maintenance	29.50	1,123.20	64.96		
Meter maintenance	68.28	5,292.81	300.67		161.19
Consumers' premises expenses		392.06			
Street lighting, operation and maintenance	189.39	3,946.09	332.21	95.28	262.18
Promotion of business	1.23	2,697.36			
Billing and collecting	636.75	9,861.36	435.26	277.21	785.21
General office, salaries and expenses	411.66	15,146.24	512.09	87.91	2,000.91
Undistributed expenses	34.45	3,175.90	101.78		89.60
Truck operation and maintenance		1,970.49			147.46
Interest	594.67	10,254.48	746.67	351.41	2,062.50
Sinking fund and principal payments on debentures	1,033.66	18,693.17	468.05	199.03	972.49
Depreciation	595.00	17,006.42	965.00	315.00	2,117.00
Other reserves		6,740.58			
Total operating costs and fixed charges	8,676.93	241,177.15	11,042.90	4,989.43	24,780.03
Net surplus	787.80	4,470.91	1,505.61	219.84	2,769.84
Net loss					
NUMBER OF CONSUMERS					
Domestic service	140	3,829	308	103	510
Commercial light service	58	761	47	38	130
Power service	6	107	3	1	15
Total	204	4,697	358	142	655

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Comber	Cottam	Courtright	Dashwood	Delaware	Dorchester	Drayton	Dresden
P.V.	P.V.	283	P.V.	P.V.	P.V.	568	1,509
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,136.98	2,476.24	1,474.14	1,429.61	1,479.43	2,346.75	3,100.20	6,334.26
2,294.01	1,205.08	1,000.80	907.25	611.39	868.85	1,985.09	5,002.54
3,313.66	370.96	....	1,184.60	....	550.57	1,137.12	3,929.57
....	....	763.24	....	....	....	....	456.54
660.00	480.00	774.00	451.00	264.00	670.00	843.33	1,864.32
....	....	....	....	....	....	....	457.67
113.25	136.36	52.11	109.39	130.06	135.13	239.72	345.58
8,517.90	4,668.64	4,064.29	4,081.85	2,484.88	4,571.30	7,305.46	18,390.48
5,565.21	2,444.83	2,388.48	3,185.04	1,459.27	3,117.21	4,818.64	11,701.92
....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....
288.94	28.71	276.69	88.61	66.98	13.99	213.58	2,257.21
49.50	....	....	....	....	....	....	....
121.78	12.05	....	7.30	....	....	....	244.90
....	....	....	....	....	....	....	....
92.88	46.03	60.40	....	7.28	91.95	125.55	262.77
....	....	....	....	....	....	....	48.00
204.99	....	168.69	115.88	131.42	166.12	....	604.09
212.04	417.07	25.12	32.52	39.77	22.43	286.99	864.81
19.21	....	31.32	1.19	....	....	....	7.04
....	....	....	....	....	....	....	214.53
58.40	335.22	135.01	104.90	94.89	109.59	370.14	....
172.64	417.92	706.81	131.00	166.76	171.70	342.99	....
482.00	393.00	243.00	231.00	168.00	387.00	576.00	880.00
....	....	....	....	....	....	....	....
7,267.59	4,094.83	4,035.52	3,897.44	2,134.37	4,079.99	6,733.89	17,085.27
1,250.31	573.81	28.77	184.41	350.51	491.31	571.57	1,305.21
....	....	....	....	....	....	....	....
97	109	59	70	54	129	155	385
47	29	26	30	19	27	50	112
3	1	1	2	....	2	4	10
147	139	86	102	73	158	209	507

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Drumbo	Dublin	Dundas	Dunnville	Dutton
Population	P.V.	P.V.	5,062	3,938	810
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	2,056.83	1,385.20	21,718.03	13,463.00	3,193.72
Commercial light service	835.28	793.68	11,094.35	12,822.59	2,509.30
Commercial power service	750.36	270.71	21,743.27	11,025.29	3,476.07
Municipal power			410.97	2,520.06	
Street lighting	522.50	700.00	5,508.00	3,673.56	1,021.44
Merchandise					
Miscellaneous	70.17		199.76	693.59	170.01
Total earnings	4,235.14	3,149.59	60,674.38	44,198.09	10,370.54
EXPENSES					
Power purchased	2,375.20	2,041.73	40,157.96	26,830.63	7,459.89
Substation operation			269.06	594.93	
Substation maintenance					
Distribution system, operation and maintenance	210.89	112.01	4,220.71	1,975.11	449.14
Line transformer maintenance			32.04	25.05	30.76
Meter maintenance	21.56	74.42	776.69	659.30	112.58
Consumers' premises expenses					
Street lighting, operation and maintenance	51.08	155.74	667.24	354.48	183.54
Promotion of business				35.20	
Billing and collecting	185.78	99.07	1,181.97	846.89	343.67
General office, salaries and expenses	89.66	68.33	1,836.17	1,228.03	154.20
Undistributed expenses	1.29	17.07	378.88	91.74	23.67
Truck operation and maintenance			647.67	225.95	
Interest	104.03	50.00	1,027.92	2,401.73	
Sinking fund and principal payments on debentures	188.70	396.66	2,431.85	2,947.26	
Depreciation	308.00	305.00	4,445.00	3,455.00	602.00
Other reserves			491.49		13.82
Total operating costs and fixed charges	3,536.19	3,320.03	58,564.65	41,671.30	9,373.27
Net surplus	698.95		2,109.73	2,526.79	997.27
Net loss		170.44			
NUMBER OF CONSUMERS					
Domestic service	85	46	1,202	851	208
Commercial light service	23	21	181	220	66
Power service	1	2	37	24	8
Total	109	69	1,420	1,095	282

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

East York Twp.	Elmira 2,352	Elora 1,143	Embro 434	Erieau 286	Erie Beach 26	Essex 1,748	Etobicoke Twp.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
192,880.12	17,436.14	7,648.43	2,843.19	3,838.45	1,613.89	7,807.69	127,981.44
26,828.11	7,119.56	3,685.24	1,577.02	1,371.26	318.35	5,910.84	18,317.97
30,307.59	5,917.16	2,931.26	1,203.93	564.66	....	5,823.85	14,423.46
5,739.51	894.72	....	....	....	....	1,712.93	4,331.88
19,564.98	1,834.00	1,687.92	672.50	378.00	....	2,454.18	13,492.44
....	....	165.83	....	....	....	....	....
334.92	772.52	430.12	80.14	27.07	9.36	340.08	553.16
275,655.23	33,974.10	16,548.80	6,376.78	6,179.44	1,941.60	24,049.57	179,100.35
170,997.92	20,155.69	9,605.75	4,019.80	3,277.59	911.85	13,873.43	109,537.94
....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....
7,941.52	1,243.89	2,081.60	83.66	120.40	74.51	165.38	6,006.34
725.58	....	53.71	....	17.68	....	69.19	266.39
4,492.21	273.09	54.04	....	42.07	21.30	475.02	1,143.63
1,124.78	25.92	....	....	8.73	....	1.60	....
2,893.33	127.62	160.44	158.92	48.97	....	236.31	1,111.03
88.43	8.10	....	38.00	....	....	95.56	....
13,334.20	664.85	753.78	299.23	381.79	151.97	1,041.33	4,957.03
11,885.22	1,067.01	535.59	203.51	210.23	6.63	1,214.33	4,251.17
1,873.11	65.18	254.75	2.10	7.08	....	159.92	1,653.34
195.21	259.36	94.66	....	....	....	335.75	1,168.52
13,478.40	1,161.35	113.35	137.91	231.79	137.53	991.29	13,535.19
16,454.92	1,851.85	850.86	517.94	387.04	151.53	559.77	9,580.10
13,946.00	2,159.00	1,172.00	535.00	382.00	83.00	1,878.00	12,000.00
600.00	....	....	....	20.53	....	65.13	....
260,030.83	29,062.91	15,730.53	5,996.07	5,135.90	1,538.32	21,162.01	165,210.68
15,624.40	4,911.19	818.27	380.71	1,043.54	403.28	2,887.56	13,889.67
....	....	....	....	....	....	....	....
9,319	519	317	101	171	69	454	3,705
397	119	71	44	13	3	118	240
33	22	2	1	2	....	18	28
9,749	660	390	146	186	72	590	3,973

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Exeter	Fergus	Fonthill	Forest
Population	1,658	2,623	800	1,475
EARNINGS	$ c.	$ c.	$ c.	$ c.
Domestic service	11,102.39	17,357.08	4,893.25	10,787.73
Commercial light service	5,261.66	6,739.37	1,368.12	5,561.16
Commercial power service	3,268.06	15,368.25	331.24	3,746.18
Municipal power	513.95	782.56	238.47	1,016.39
Street lighting	2,677.50	2,796.21	1,065.00	2,321.00
Merchandise	213.32			197.01
Miscellaneous	837.51	51.88		730.50
Total earnings	23,874.39	43,095.35	7,896.08	24,359.97
EXPENSES				
Power purchased	14,455.57	31,860.89	3,792.33	14,957.46
Substation operation				
Substation maintenance				
Distribution system, operation and maintenance	546.74	941.93	314.22	1,554.44
Line transformer maintenance	42.28	204.91	32.17	
Meter maintenance	145.96	312.85	3.15	191.67
Consumers' premises expenses		48.20		162.63
Street lighting, operation and maintenance	283.99	502.36	181.79	284.42
Promotion of business		27.44		347.34
Billing and collecting	691.34	756.98	609.44	806.55
General office, salaries and expenses	1,822.18	864.95	101.98	1,825.35
Undistributed expenses	62.09	186.51		179.31
Truck operation and maintenance		369.66		131.80
Interest	328.04	847.68	862.02	479.45
Sinking fund and principal payments on debentures	1,111.86	1,216.12	1,195.05	896.67
Depreciation	1,587.00	1,763.00	528.00	1,499.00
Other reserves				
Total operating costs and fixed charges	21,077.05	39,903.48	7,620.15	23,316.09
Net surplus	2,797.34	3,191.87	275.93	1,043.88
Net loss				
NUMBER OF CONSUMERS				
Domestic service	449	653	211	448
Commercial light service	117	113	27	115
Power service	9	14	4	21
Total	575	780	242	584

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Galt 13,958	Georgetown 2,283	Glencoe 903	Goderich 4,344	Granton P.V.	Guelph 21,173	Hagersville 1,374	Hamilton 154,020
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
93,324.57	16,368.27	5,278.55	32,328.48	1,943.51	117,459.78	5,263.50	942,647.88
41,829.74	6,479.99	3,283.93	15,963.03	1,037.98	53,174.08	4,897.97	414,503.05
99,949.16	24,092.99	1,816.25	9,645.17	785.37	116,674.83	12,336.54	1,751,527.34
5,513.54	720.58	1,402.39	3,157.85		12,753.71		77,988.58
14,660.43	2,349.74	1,956.18	3,814.00	370.00	18,664.54	2,038.33	123,850.05
1,565.17			47.67		813.43		
3,377.88	1,078.90	308.17	277.40	208.34	1,193.66	727.35	43,743.57
260,220.49	51,090.47	14,045.47	65,233.60	4,345.20	320,734.03	25,263.69	3,354,260.47
167,745.03	37,412.24	9,230.54	39,468.05	2,755.55	230,761.70	19,192.07	2,264,079.32
3,870.37			1,830.41				60,322.22
39.35					2,508.83		4,381.56
3,206.34	1,165.99	123.74	2,265.69	164.36	10,751.98	2,070.04	28,141.56
503.25	71.73		51.92		354.13	141.15	2,571.68
2,398.64	381.59	71.09	677.47	58.38	3,870.48	292.16	22,784.26
117.51		66.10			1,242.06		14,891.05
3,125.01	384.96	141.54	638.40	31.76	5,258.10	439.12	13,368.98
2,309.96		17.14	5.82		1,693.53		18,605.68
4,018.89	1,701.74	409.26	2,075.15	252.62	5,918.97	675.23	54,724.30
6,413.77	1,016.19	565.51	1,757.23	65.49	13,374.12	652.34	47,792.21
1,574.36	216.93	210.28	158.94	1.43	1,196.35	68.55	35,582.51
403.92	680.40		233.43		2,556.40	426.70	
11,758.97	541.36	353.77	2,346.76	113.09	250.00	122.47	170,950.38
19,517.08	911.62	1,152.47	2,590.41	141.94	105.10	264.17	286,886.01
24,165.00	2,217.00	1,061.00	5,778.00	264.00	17,432.00	1,210.00	135,951.94
					698.85		20,801.69
251,167.45	46,701.75	13,402.44	59,877.68	3,848.62	297,972.60	25,554.00	3,181,835.35
9,053.04	4,388.72	643.03	5,355.92	496.58	22,761.43		172,425.12
						290.31	
3,657	730	216	1,194	82	5,155	335	37,842
498	131	81	228	34	799	108	5,020
103	29	6	20	1	137	14	1,258
4,258	890	303	1,442	117	6,091	457	44,120

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA
SYSTEM—Continued

Municipality	Harriston	Harrow	Hensall	Hespeler	Highgate
Population	1,325	933	702	2,877	334
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	7,621.37	8,086.14	4,217.41	16,378.19	1,681.07
Commercial light service	4,858.78	4,226.32	1,906.39	6,010.46	893.68
Commercial power service	5,393.34	4,413.83	2,554.46	43,038.09	1,203.68
Municipal power	471.01			1,568.44	38.90
Street lighting	1,539.00	1,308.66	996.00	3,107.00	567.00
Merchandise				682.94	
Miscellaneous	53.21	166.00	356.38		117.28
Total earnings	19,936.71	18,200.95	10,030.64	70,785.12	4,501.61
EXPENSES					
Power purchased	12,073.50	13,698.90	6,621.89	50,692.07	2,843.72
Substation operation				411.91	
Substation maintenance				48.82	
Distribution system, operation and maintenance	1,666.83	46.04	435.94	3,469.62	43.02
Line transformer maintenance		25.73		75.36	
Meter maintenance	72.68	326.95	0.75	104.90	63.08
Consumers' premises expenses		144.48			
Street lighting, operation and maintenance	301.33	111.69	114.02	380.32	77.68
Promotion of business					
Billing and collecting	752.39	482.96	257.25	866.27	299.97
General office, salaries and expenses	348.32	363.24	526.41	1,238.11	144.25
Undistributed expenses	39.82	5.28	46.62	483.89	16.51
Truck operation and maintenance	79.54			450.34	
Interest	428.43	402.61	347.43	1,639.15	
Sinking fund and principal payments on debentures	591.78	619.24	519.30	2,093.12	
Depreciation	1,085.00	809.00	703.00	2,705.00	376.00
Other reserves		41.21		200.00	
Total operating costs and fixed charges	17,439.62	17,077.33	9,572.61	64,858.88	3,864.23
Net surplus	2,497.09	1,123.62	458.03	5,926.24	637.38
Net loss					
NUMBER OF CONSUMERS					
Domestic service	340	259	186	720	98
Commercial light service	102	76	55	106	34
Power service	14	5	13	29	6
Total	456	340	254	855	138

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Humberstone 2,532	Ingersoll 5,158	Jarvis 495	Kingsville 2,125	Kitchener 31,933	Lambeth P.V.	La Salle 687	Leamington 5,020
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
9,483.79	32,553.65	2,527.92	14,386.98	202,274.36	3,237.04	6,326.32	29,256.31
3,552.98	15,887.71	1,910.26	6,656.59	109,653.19	1,368.21	1,398.45	15,821.28
3,645.81	28,586.67	3,870.22	3,440.79	247,139.19	....	2,434.27	17,960.05
....	2,055.58	....	1,318.21	22,107.97	567.42	....	3,701.37
1,449.50	4,583.14	770.00	2,832.00	32,589.82	607.82	495.00	5,473.48
....	319.57	....	....	....	....	....	....
255.60	585.81	33.13	1,169.07	7,363.69	101.37	114.51	1,771.31
18,387.68	84,572.13	9,111.53	29,803.64	621,128.22	5,881.86	10,768.55	73,983.80
10,321.41	60,139.35	6,597.84	16,672.68	452,542.05	4,042.24	6,582.93	46,415.49
....	321.73	....	....	6,393.71	....	....	....
....	....	....	....	4,822.40	....	....	....
1,232.79	3,569.65	56.33	1,296.53	12,433.84	217.41	630.53	2,330.35
....	618.60	....	138.75	653.97	....	84.09	....
106.00	396.23	20.95	584.44	5,497.41	5.70	236.36	397.84
....	243.00	....	199.58	1,883.64	....	....	22.75
231.07	502.88	50.06	401.19	7,617.86	68.30	....	786.20
....	474.98	6.36	....	710.18	....	....	....
657.41	1,952.82	522.22	1,470.68	14,044.64	285.12	369.70	1,725.00
111.45	3,857.03	52.49	1,261.83	14,742.42	30.00	375.73	2,900.27
39.49	272.95	19.39	387.59	3,460.54	1.90	54.24	614.85
154.50	407.24	....	341.52	2,276.43	....	....	355.31
890.13	3,552.48	236.03	1,629.32	8,195.54	13.89	598.30	1,707.85
1,500.00	....	572.53	804.38	17,083.90	....	754.59	2,477.01
1,025.00	4,001.00	442.00	2,080.00	33,825.00	372.00	905.00	3,734.00
....	....	....	....	....	....	35.00	57.40
16,269.25	80,309.94	8,576.20	27,268.49	586,183.53	5,036.56	10,626.47	63,524.32
2,118.43	4,262.19	535.33	2,535.15	34,944.69	845.30	142.08	10,459.48
....	....	....	....	....	....	....	....
575	1,340	134	600	7,357	118	185	1,369
50	240	43	150	1,009	27	14	254
4	42	4	13	234	1	3	28
629	1,622	181	763	8,600	146	202	1,651

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Listowel	London	London Twp.	Long Branch	Lucan
Population	2,798	75,484		3,746	643
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	17,615.10	570,951.81	12,142.83	26,412.78	4,475.79
Commercial light service	9,612.26	202,687.56	2,397.36	6,427.80	1,755.49
Commercial power service	12,741.91	355,382.27	1,900.28	1,399.10	462.39
Municipal power	1,487.34	63,998.08		1,079.40	
Street lighting	3,840.60	55,101.23	870.50	3,823.04	994.02
Merchandise	4.71	2,134.25			
Miscellaneous	1,220.96	35,117.41	390.08	59.70	288.44
Total earnings	46,522.88	1,285,372.61	17,701.05	39,201.82	7,976.13
EXPENSES					
Power purchased	31,405.14	809,158.40	12,506.86	20,684.61	4,572.65
Substation operation	81.96	15,316.88			
Substation maintenance		12,897.00			
Distribution system, operation and maintenance	1,918.16	22,475.73	628.84	2,465.79	789.97
Line transformer maintenance	33.83	4,071.04		43.30	
Meter maintenance	172.01	19,365.77	161.24	354.02	56.06
Consumers' premises expenses		5,585.11			
Street lighting, operation and maintenance	832.63	10,144.37	224.22	491.55	89.36
Promotion of business	52.31	27,920.03	214.28		
Billing and collecting	795.83	28,660.43	435.34	1,733.17	631.72
General office, salaries and expenses	1,639.87	41,933.37	786.43	2,038.00	318.29
Undistributed expenses	147.40	7,479.74	5.60	577.15	46.89
Truck operation and maintenance	169.83	2,598.53			
Interest	255.06	39,438.43	370.80	1,243.53	188.36
Sinking fund and principal payments on debentures	896.71	71,745.75	593.65	2,228.90	299.53
Depreciation	2,896.00	102,937.10	832.00	2,427.00	710.00
Other reserves		8,294.72			
Total operating costs and fixed charges	41,296.74	1,230,022.40	16,759.26	34,287.02	7,702.83
Net surplus	5,226.14	55,350.21	941.79	4,914.80	273.30
Net loss					
NUMBER OF CONSUMERS					
Domestic service	745	17,686	372	1,179	168
Commercial light service	156	2,144	21	115	45
Power service	19	447	4	5	6
Total	920	20,277	397	1,299	219

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Lynden P.V.	Markham 1,114	Merlin P.V.	Merritton 2,530	Milton 1,739	Milverton 992	Mimico 6,915	Mitchell 1,567
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,159.32	7,488.53	2,129.31	12,690.87	12,099.94	5,476.45	58,423.06	11,315.97
925.39	2,756.31	1,574.81	2,715.84	5,632.05	3,234.59	10,466.83	5,092.62
891.84	2,483.34	1,107.96	93,192.85	11,529.69	2,730.22	3,953.24	3,698.72
...	467.69	...	...	...	550.41	7,810.53	912.69
440.00	1,344.00	645.00	3,370.00	2,038.91	999.00	7,047.00	2,088.00
...	...	...	...	251.17	...	...	1,278.85
12.87	289.65	315.76	4.00	1,039.72	85.99	...	1,328.00
4,429.42	14,829.52	5,772.84	111,973.56	32,591.48	13,076.66	87,700.66	25,714.85
2,898.34	8,718.73	3,708.46	91,055.86	22,298.93	9,416.35	53,746.46	14,153.77
...	...	...	296.11	254.86	...	...	36.94
...	...	...	...	...	...	18.63	...
78.54	1,135.15	129.87	2,288.65	1,434.72	184.50	7,217.35	788.95
...	16.40	83.93	46.77	...	16.68	174.87	80.42
23.60	59.70	110.18	640.72	282.79	111.54	970.67	377.16
...	3.00	...	2.25	...	62.75	131.10	17.66
29.41	122.77	125.04	618.03	321.05	88.49	1,334.57	458.02
...	...	...	...	...	...	...	...
118.00	...	260.49	954.36	806.90	677.17	1,890.44	789.94
78.95	798.83	289.85	1,200.29	1,982.14	393.71	1,759.63	1,755.66
20.00	...	1.85	231.32	74.10	161.42	264.10	546.20
...	339.81	...	178.33	608.33	...	538.32	255.30
128.22	23.99	376.92	919.99	409.74	10.14	4,126.76	7.60
181.06	436.25	800.08	1,765.67	821.84	...	6,051.27	
304.00	856.00	399.00	2,408.00	2,020.23	746.00	5,845.00	3,366.00
...	55.00	...	...	...	...	...	...
3,860.12	12,565.63	6,285.67	102,606.35	31,315.63	11,868.75	84,069.17	22,633.62
569.30	2,263.89	...	9,367.21	1,275.85	1,207.91	3,631.49	3,081.23
...	...	512.83	...	...	...	...	...
85	290	110	640	456	235	1,775	447
19	70	43	67	106	81	138	115
1	8	1	10	13	7	20	22
105	368	154	717	575	323	1,933	584

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality Population	Moorefield P.V.	Mount Brydges P.V.	Newbury 282	New Hamburg 1,456	New Toronto 8,040
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	1,195.37	2,771.50	1,258.85	9,408.29	37,544.52
Commercial light service	681.64	881.51	785.29	4,302.25	16,166.77
Commercial power service	1,246.19	933.36	785.73	5,527.05	122,194.69
Municipal power					12,963.34
Street lighting	350.00	547.00	705.00	2,217.00	8,427.62
Merchandise				168.09	
Miscellaneous	18.11	333.27	18.30	240.09	
Total earnings	3,491.31	5,466.64	3,553.17	21,862.77	197,296.94
EXPENSES					
Power purchased	2,448.20	3,514.18	2,146.78	13,920.53	166,417.40
Substation operation				188.76	
Substation maintenance					
Distribution system, operation and maintenance	39.06	116.20	108.70	569.35	4,408.87
Line transformer maintenance				12.21	219.68
Meter maintenance		42.19		332.42	784.07
Consumers' premises expenses					81.71
Street lighting, operation and maintenance	25.32	19.03	65.49	232.07	1,920.21
Promotion of business					
Billing and collecting		187.88		677.45	2,973.45
General office, salaries and expenses	129.64	119.77	135.27	968.87	5,837.32
Undistributed expenses		16.32	18.14	90.70	1,395.48
Truck operation and maintenance				185.03	619.19
Interest	40.68	111.09	204.55	253.98	194.22
Sinking fund and principal payments on debentures	343.73	179.33	500.00	917.44	352.24
Depreciation	207.00	344.00	321.00	1,381.00	5,785.00
Other reserves					500.00
Total operating costs and fixed charges	3,233.63	4,649.99	3,499.93	19,729.81	191,488.84
Net surplus	257.68	816.65	53.24	2,132.96	5,808.10
Net loss					
NUMBER OF CONSUMERS					
Domestic service	61	136	70	353	1,605
Commercial light service	23	36	27	97	192
Power service	2	3	2	13	34
Total	86	175	99	463	1,831

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Niagara Falls 18,527	Niagara-on-the-Lake 1,815	North York Twp.	Norwich 1,163	Oil Springs 472	Otterville P.V.	Palmerston 1,410	Paris 4,324
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
150,894.64	14,401.87	119,894.55	8,594.84	1,571.85	2,326.46	9,312.57	23,879.14
60,355.71	4,269.72	18,836.85	3,900.65	1,448.26	1,790.58	4,627.19	8,637.45
65,799.68	995.78	28,878.18	1,593.30	7,478.58	361.48	4,708.92	14,129.99
17,916.58	1,967.41	5,292.39	700.43	......	114.16	1,724.97	1,115.33
27,175.34	2,856.96	3,817.73	2,120.00	768.00	813.50	2,136.38	5,510.00
......	644.79	......	533.51	......	......	39.00	......
60.00	402.19	2,000.75	232.88	463.41	61.13	23.35	2,957.74
322,201.95	25,538.72	178,720.45	17,675.61	11,730.10	5,467.31	22,572.38	56,229.65
185,741.75	12,983.74	96,774.31	11,100.41	7,981.04	3,682.25	14,599.84	33,368.48
9,658.51	......	......	......	......	......	282.94	663.97
......	......	......	......	......	......	148.93	......
6,755.92	2,467.91	8,194.95	1,373.89	417.63	240.27	1,175.17	3,359.63
659.65	......	410.64	9.64	......	1.80	93.29	194.70
5,654.48	328.06	1,508.47	199.58	363.95	2.00	154.73	972.40
1,478.00	0.45	304.36	......	......	......	11.32	90.45
4,817.50	820.19	630.05	230.56	49.78	93.20	418.21	949.93
......	......	......	......	89.23	......	......	186.05
8,238.41	936.74	4,955.54	441.56	386.40	305.19	411.61	1,553.97
9,058.78	1,016.49	3,847.51	448.22	190.42	87.87	545.46	1,347.97
3,987.76	90.83	2,071.90	70.76	62.94	18.71	72.08	693.75
892.12	483.01	2,818.77	109.06	......	......	101.93	394.02
16,132.64	1,068.83	18,701.03	240.40	49.40	......	248.75	456.62
28,839.13	1,119.10	18,646.06	654.44	822.44	......	292.01	817.88
25,260.00	1,776.00	13,093.00	915.00	758.00	467.00	1,283.00	5,541.00
......	......	......	......	......	......	......	85.16
307,174.65	23,091.35	171,956.59	15,793.52	11,171.23	4,898.29	19,839.27	50,675.98
15,027.30	2,447.37	6,763.86	1,882.09	558.87	569.02	2,733.11	5,553.67
......	......	......	......	......	......	......	......
4,538	485	3,350	351	79	115	384	1,060
687	83	282	90	31	43	94	180
85	10	39	7	33	3	14	23
5,310	578	3,671	448	143	161	492	1,263

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality Population	Parkhill 979	Petrolia 2,705	Platts-ville P.V.	Point Edward 1,290	Port Colborne 5,844
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	5,346.70	12,156.57	2,606.03	5,866.98	31,354.49
Commercial light service	3,448.26	7,071.87	1,067.28	2,024.66	15,449.56
Commercial power service	837.86	24,292.03	1,067.39	29,807.50	8,231.90
Municipal power					7,202.86
Street lighting	1,537.94	2,674.00	408.00	1,602.62	7,853.12
Merchandise		416.49			655.81
Miscellaneous	28.82	1,093.88	12.33	743.91	1,007.39
Total earnings	11,199.58	47,704.84	5,161.03	40,045.67	71,755.13
EXPENSES					
Power purchased	7,481.91	29,006.82	3,071.74	35,527.04	38,326.01
Substation operation					
Substation maintenance					
Distribution system, operation and maintenance	301.88	3,113.89	7.10	226.74	2,565.48
Line transformer maintenance		170.63		100.05	136.70
Meter maintenance	35.36	656.85	11.96	174.50	715.92
Consumers' premises expenses					
Street lighting, operation and maintenance	121.90	393.06	18.28	198.91	1,780.51
Promotion of business					95.72
Billing and collecting	297.61	1,377.26	152.81		1,757.40
General office, salaries and expenses	182.05	2,230.12	6.32	1,847.72	3,474.57
Undistributed expenses	39.59	245.23	21.60		218.19
Truck operation and maintenance		468.75			738.82
Interest	248.42	1,072.39	121.10	404.18	4,465.13
Sinking fund and principal payments on debentures	1,166.17	2,643.57	219.57	516.04	7,914.95
Depreciation	772.00	3,213.00	289.00	1,151.00	4,732.00
Other reserves					234.00
Total operating costs and fixed charges	10,646.89	44,591.57	3,919.48	40,146.18	67,155.40
Net surplus	552.69	3,113.27	1,241.55		4,599.73
Net loss				100.51	
NUMBER OF CONSUMERS					
Domestic service	248	694	96	316	1,360
Commercial light service	74	184	25	50	229
Power service	3	62	1	9	23
Total	325	940	122	375	1,612

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Port Credit 1,750	Port Dalhousie 1,408	Port Dover 1,606	Port Rowan 666	Port Stanley 769	Preston 6,287	Princeton P.V.	Queenston P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
13,988.44	15,183.73	7,617.85	3,158.19	12,376.21	34,299.98	2,144.06	3,264.77
5,509.18	2,481.65	4,257.23	1,761.05	3,849.80	17,575.80	724.91	966.00
3,500.06	6,208.26	5,281.15	69.22	3,616.72	42,373.40	2,658.62	....
1,292.88	....	50.86	....	902.27	1,162.19	....	....
2,750.00	1,636.25	2,675.54	1,131.00	2,335.66	5,032.00	456.00	304.02
....	....	....	27.42	....	....	....	....
457.14	145.74	....	....	548.54	1,560.27	23.75	32.00
27,497.70	25,655.63	19,882.63	6,146.88	23,629.20	102,003.64	6,007.34	4,566.79
18,945.28	16,815.05	11,158.80	2,700.59	13,747.96	67,347.82	4,482.54	2,558.70
....	....	....	....	....	4,245.81	....	....
....	....	....	....	....	22.13	....	....
1,549.00	2,197.24	1,591.42	88.65	2,995.30	1,896.91	71.18	141.83
155.91	19.20	350.20	....	118.50	29.66	....	1.00
686.63	237.63	775.97	96.45	147.79	804.17	17.35	8.50
34.50	9.80	....	....	....	51.72	....	....
326.43	295.63	643.97	39.13	163.54	822.77	69.78	21.87
....	....	....	....	....	....	....	....
755.95	616.36	784.95	131.72	827.85	1,593.25	170.53	....
299.16	1,257.53	796.83	89.40	727.05	2,334.55	37.62	261.31
14.65	59.88	101.41	....	90.52	747.20	....	....
....	376.07	....	....	252.83	550.17	....	....
333.00	444.63	409.57	489.50	281.97	2,131.34	82.08	246.59
619.48	457.88	1,368.14	476.61	950.85	4,424.80	148.85	552.51
1,629.00	1,022.00	1,411.00	358.00	1,443.00	8,969.00	274.00	373.00
150.00	....	....	....	....	400.00	....	....
25,498.99	23,808.90	19,392.26	4,470.05	21,747.16	96,371.30	5,353.93	4,165.31
1,998.71	1,846.73	490.37	1,676.83	1,882.04	5,632.34	653.41	401.48
....	....	....	....	....	....	....	....
453	615	529	109	621	1,472	78	67
81	46	126	39	100	226	19	11
7	13	13	1	8	49	3	....
541	674	668	149	729	1,747	100	78

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Richmond Hill	Ridgetown	Riverside	Rockwood	Rodney
Population	1,234	1,985	4,820	P.V.	713
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	7,456.15	9,568.29	38,351.60	3,257.01	3,355.45
Commercial light service	3,693.45	5,794.68	4,200.95	1,132.44	2,407.71
Commercial power service	1,803.96	3,514.62	4,033.61	459.08	2,318.49
Municipal power	423.07	864.10	1,061.38	....	....
Street lighting	1,435.92	3,169.00	2,900.04	774.00	1,042.33
Merchandise	8.73	....	....	....	....
Miscellaneous	153.17	529.25	135.63	52.27	23.72
Total earnings	14,974.45	23,439.94	50,683.21	5,674.80	9,147.70
EXPENSES					
Power purchased	11,089.68	15,742.07	29,307.61	3,884.13	5,750.17
Substation operation	....	....	....	....	....
Substation maintenance	....	....	....	....	....
Distribution system, operation and maintenance	992.29	783.36	770.11	124.54	263.87
Line transformer maintenance	....	35.29	115.34	18.27	....
Meter maintenance	64.87	202.42	680.63	82.42	47.44
Consumers' premises expenses	231.12	195.88	810.40	....	....
Street lighting, operation and maintenance	130.58	414.99	522.24	64.61	156.46
Promotion of business	....	....	189.57	....	....
Billing and collecting	775.30	793.42	3,303.33	....	399.76
General office, salaries and expenses	339.14	896.45	2,093.46	504.30	280.72
Undistributed expenses	19.47	128.58	545.56	....	19.31
Truck operation and maintenance	....	146.97	915.91	....	....
Interest	159.37	336.84	2,564.67	108.71	1.21
Sinking fund and principal payments on debentures	440.67	425.98	4,478.66	91.90	....
Depreciation	607.00	1,457.00	4,298.00	474.00	450.00
Other reserves	....	....	....	....	....
Total operating costs and fixed charges	14,849.49	21,559.25	50,595.49	5,352.88	7,368.94
Net surplus	124.96	1,880.69	87.72	321.92	1,778.76
Net loss	....	....	....	....	....
NUMBER OF CONSUMERS					
Domestic service	334	562	1,232	155	216
Commercial light service	63	140	54	32	76
Power service	16	20	8	2	6
Total	413	722	1,294	189	298

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

St. Catharines 26,571	St. Clair Beach 148	St. George P.V.	St. Jacobs P.V.	St. Marys 4,032	St. Thomas 16,156	Sarnia 18,064
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
145,332.10	2,140.45	3,045.01	4,211.45	30,417.92	121,463.96	106,990.83
55,368.75	2,344.87	1,413.22	1,481.09	11,641.24	53,182.82	51,045.06
118,155.74	81.80	2,587.47	3,903.16	17,208.23	54,764.80	167,776.28
....	....	....	....	3,308.79	5,853.60	5,396.79
25,005.15	....	370.50	460.00	4,713.50	14,624.25	18,714.48
....	....	....	....	....	1,074.39	....
2,390.13	....	100.54	138.51	947.50	3,721.64	9,029.41
346,251.87	4,567.12	7,516.74	10,194.21	68,237.18	254,685.46	358,952.85
222,814.27	2,556.28	5,331.41	8,017.41	42,267.47	180,300.62	230,346.13
4,131.32	....	....	....	1,400.40	7,462.97	8,148.81
....	....	....	....	197.61	539.83	200.00
10,189.11	140.52	49.80	65.35	2,220.91	9,750.70	8,374.58
1,153.96	10.21	....	....	157.69	863.73	195.07
4,320.00	50.45	26.10	170.15	885.59	2,030.62	3,772.31
2,495.43	51.16	....	....	5.39	1,941.12	112.10
2,826.32	....	124.13	52.42	1,080.75	3,118.17	5,261.85
119.26	....	....	....	316.45	920.95	4,377.01
10,919.31	183.44	485.57	326.23	1,159.34	4,752.48	8,779.05
8,962.59	32.18	67.01	188.55	1,344.26	9,034.35	9,614.93
5,094.73	40.59	16.95	2.69	456.32	4,902.75	5,777.62
1,275.70	67.25	....	....	479.55	1,112.47	1,479.61
8,234.83	208.47	160.18	50.96	1,984.46	102.44	4,906.97
13,867.23	408.84	253.65	451.13	2,418.99	....	13,783.79
18,416.00	362.00	335.00	386.00	4,755.00	14,406.00	19,642.00
....	....	....	....	....	184.38	....
314,820.06	4,111.39	6,849.80	9,710.89	61,130.18	241,423.58	324,771.83
31,431.81	455.73	666.94	483.32	7,107.00	13,261.88	34,181.02
....	....	....	....	....	....	....
6,496	45	136	120	1,000	4,102	4,635
750	3	36	28	180	632	649
146	1	2	7	36	76	84
7,392	49	174	155	1,216	4,810	5,368

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality Population	Scarboro Twp.	Seaforth 1,717	Simcoe 5,503	Spring-field 386	Stamford Twp.
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	100,992.24	10,741.71	23,086.16	1,803.42	59,017.71
Commercial light service	20,958.73	5,626.59	27,220.90	813.73	7,741.84
Commercial power service	11,668.16	4,965.34	25,182.62	1,420.65	11,411.19
Municipal power	12,511.30	735.29	2,210.80		1,836.32
Street lighting	14,537.39	1,749.50	4,575.50	561.00	7,433.92
Merchandise		255.19	245.22		1,962.04
Miscellaneous	269.42	82.15		241.22	43.50
Total earnings	160,937.24	24,155.77	82,521.20	4,840.02	89,446.52
EXPENSES					
Power purchased	87,845.05	15,794.29	48,047.42	2,843.71	42,051.77
Substation operation	43.29	174.23			377.75
Substation maintenance			481.74		
Distribution system, operation and maintenance	5,332.83	1,460.03	4,899.79	90.87	4,626.61
Line transformer maintenance	695.43	28.22	385.58		110.75
Meter maintenance	3,780.58	281.93	1,395.76		795.69
Consumers' premises expenses	56.12	41.22	292.09		562.66
Street lighting, operation and maintenance	1,969.60	394.70	769.07	18.25	1,102.79
Promotion of business			1,379.99		909.31
Billing and collecting	5,959.82	682.95	1,906.95	340.25	3,010.27
General office, salaries and expenses	5,145.27	518.31	2,883.68	71.49	4,500.42
Undistributed expenses	1,900.39	326.25	768.88	1.77	1,115.22
Truck operation and maintenance	1,665.13	236.17	475.63		1,181.52
Interest	7,660.48	6.26	2,054.18	178.98	8,388.11
Sinking fund and principal payments on debentures	15,877.17		3,437.88	198.06	12,384.76
Depreciation	12,104.00	1,972.00	3,672.00	379.00	6,553.00
Other reserves	400.00				
Total operating costs and fixed charges	150,435.16	21,916.56	72,850.64	4,122.38	87,670.63
Net surplus	10,502.08	2,239.21	9,670.56	717.64	1,775.89
Net loss					
NUMBER OF CONSUMERS					
Domestic service	4,653	471	1,305	97	1,728
Commercial light service	367	118	329	30	126
Power service	38	16	38	3	15
Total	5,058	605	1,672	130	1,869

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Stouffville 1,149	Stratford 17,643	Strathroy 2,886	Streetsville 676	Sutton 804	Tavistock 1,029	Tecumseh 2,472	Thamesford P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
7,074.18	148,811.20	20,493.76	5,895.04	7,926.33	6,874.53	13,256.39	2,667.25
3,235.80	55,449.65	10,556.49	......	3,495.36	2,499.63	4,135.62	1,427.54
946.48	54,751.05	14,260.87	3,576.69	1,106.23	9,193.05	2,426.30	2,132.63
......	10,333.39	1,139.77	......	......	483.47	......	......
1,512.00	16,558.79	4,050.96	935.50	1,984.50	1,287.96	1,248.00	517.00
......	1,891.45	......	......	......	......	......	......
402.16	11,801.68	1,183.46	598.01	109.38	492.13	......	398.10
13,170.62	299,597.21	51,685.31	11,005.24	14,621.80	20,830.77	21,066.31	7,142.52
8,469.62	187,539.85	31,282.70	3,941.69	9,298.56	16,300.35	10,188.63	5,024.41
......	4,137.60	341.50	974.27	......	......	......	......
......	1,366.88	80.26	......	......	......	......	......
818.97	6,968.68	1,159.59	521.43	256.20	471.82	579.39	311.21
......	472.43	306.13	27.36	......	195.67	125.14	......
......	3,132.45	492.30	6.20	......	145.09	393.51	86.12
......	333.16	......	......	80.79	......	247.43	......
179.37	3,034.42	960.18	134.17	180.49	121.93	305.03	60.88
......	1,450.06	2,528.64	......	......	......	......	......
......	5,245.40	748.18	674.80	......	658.32	1,709.03	216.74
428.16	8,806.63	1,802.44	255.84	754.01	198.23	958.86	49.11
......	3,198.84	368.72	62.36	......	57.42	208.68	17.08
......	802.06	287.71	......	163.46	......	486.41	......
258.54	19,616.66	1,635.26	788.76	736.57	162.11	372.35	71.12
1,158.44	9,239.60	1,689.72	1,795.94	1,581.24	228.20	1,955.51	143.03
580.00	21,984.00	3,673.00	670.00	958.00	878.00	1,630.00	482.00
......	500.00	......	......	......	......	......	......
11,893.10	277,828.72	47,356.33	9,852.82	14,009.32	19,417.14	19,159.97	6,461.70
1,277.52	21,768.49	4,328.98	1,152.42	612.48	1,413.63	1,906.34	680.82
......	......	......	......	......	......	......	......
369	4,322	805	166	407	265	517	126
83	627	166	44	77	80	45	41
5	127	26	4	3	8	3	7
457	5,076	997	214	487	353	565	174

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Thamesville	Thedford	Thorndale	Thorold	Tilbury
Population	769	583	P.V.	4,959	1,975
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	3,696.70	3,003.70	1,582.29	19,597.17	7,272.74
Commercial light service	2,852.59	1,857.33	829.96	7,242.68	8,596.60
Commercial power service	1,417.45	1,364.61	224.77	35,394.96	9,774.99
Municipal power	261.31			4,205.70	225.00
Street lighting	1,200.00	1,035.00	384.00	3,310.95	1,613.24
Merchandise					
Miscellaneous	249.59	108.01	26.88	509.76	677.18
Total earnings	9,677.64	7,368.65	3,047.90	70,261.22	28,159.75
EXPENSES					
Power purchased	6,715.20	4,404.08	2,327.75	49,833.95	19,007.85
Substation operation				3,384.59	
Substation maintenance					
Distribution system, operation and maintenance	473.69	305.90	180.21	1,609.19	1,179.45
Line transformer maintenance		77.54		80.85	
Meter maintenance	25.35	149.99	8.24	441.79	16.86
Consumers' premises expenses	80.92			14.06	25.68
Street lighting, operation and maintenance	302.97	80.17	86.22	674.57	347.68
Promotion of business				43.80	
Billing and collecting	282.15	207.70	85.97	1,546.21	750.49
General office, salaries and expenses	293.89	79.60	46.75	1,447.21	686.12
Undistributed expenses	24.85	14.57	0.99	172.73	156.12
Truck operation and maintenance				367.67	150.18
Interest		424.43	61.84		316.22
Sinking fund and principal payments on debentures		1,014.12	100.79		759.00
Depreciation	825.00	428.00	261.00	2,933.00	1,195.00
Other reserves					
Total operating costs and fixed charges	9,024.02	7,186.10	3,159.76	62,549.62	24,590.65
Net surplus	653.62	182.55		7,711.60	3,569.10
Net loss			111.86		
NUMBER OF CONSUMERS					
Domestic service	224	130	69	1,128	440
Commercial light service	76	44	18	145	138
Power service	7	3	1	17	10
Total	307	177	88	1,290	588

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*Includes $30,000.00 provision for possible York Township profit.

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Tillsonburg 3,513	Toronto 638,271	Toronto Twp.	Trafalgar Twp. Area No. 1	Trafalgar Twp. Area No. 2	Wallaceburg 4,589	Wardsville 257
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c
16,896.81	4,291,453.26	65,834.51	14,145.61	6,296.42	18,952.14	1,091.53
14,113.90	3,184,579.12	14,963.36	699.83		11,227.19	1,154.84
11,390.95	3,671,807.92	10,128.68	756.45		51,625.15	
1,687.33	1,233,551.48				1,943.92	
4,396.32	537,530.40	4,970.21			4,170.00	720.00
116.19					114.12	
483.39	266,425.73	1,343.20	334.70	136.40	1,712.54	2.09
49,084.89	13,185,347.91	97,239.96	15,936.59	6,432.82	89,745.06	2,968.46
29,096.82	6,979,355.91	57,424.04	8,192.00	2,996.31	62,028.81	1,769.23
910.13	201,825.58				289.38	
	250,183.26					
2,407.90	296,638.88	4,471.59	2,661.37	435.65	3,577.67	44.46
72.89	32,278.28	73.98			1,325.48	
269.15	107,808.33	1,157.73	142.40	51.20	614.12	54.09
	210,137.48					
915.76	112,631.89	786.61			654.13	38.22
66.79	151,752.74				214.38	
1,176.67	420,032.98	3,959.56			2,295.37	
3,163.48	370,941.97	5,109.38	1,596.88	625.23	2,797.04	165.54
130.77	*174,940.16	348.62	150.39		1,345.05	
494.86		1,215.17	515.38		842.26	
356.22	1,187,733.46	2,886.20	583.09	520.38	2,227.11	206.14
1,178.57	1,357,793.47	5,055.00	1,090.50		3,250.53	491.70
3,545.00	859,194.31	9,767.00	1,265.00	368.00	5,179.00	260.00
200.00	74,061.04					
43,985.01	12,787,309.74	92,254.88	16,197.01	4,996.77	86,640.33	3,029.38
5,099.88	398,038.17	4,985.08		1,436.05	3,104.73	
			260.42			60.92
960	158,340	2,058	323	158	1,073	49
231	24,910	185	2		236	24
32	5,135	36	9		29	
1,223	188,385	2,279	334	158	1,338	73

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Continued

Municipality	Water-down	Waterford	Waterloo	Watford	Welland
Population	912	1,173	8,310	916	10,402
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	5,693.23	6,346.32	63,945.76	6,435.98	55,136.71
Commercial light service	1,746.91	2,018.38	23,828.49	3,637.31	30,911.88
Commercial power service	1,505.34	4,498.91	28,483.01	2,914.74	74,229.72
Municipal power	192.03	258.79	3,595.69	393.91	2,490.74
Street lighting	856.00	1,512.00	7,595.97	1,344.96	10,944.83
Merchandise			390.27		589.61
Miscellaneous	88.36	269.76	1,478.10	371.79	7,866.18
Total earnings	10,081.87	14,904.16	129,317.29	15,098.69	182,169.67
EXPENSES					
Power purchased	6,265.98	10,971.73	81,834.66	10,665.89	92,860.48
Substation operation			3,350.08		5,162.78
Substation maintenance			1,804.33		337.88
Distribution system, operation and maintenance	401.14	678.39	4,656.56	734.67	6,805.60
Line transformer maintenance	155.58	150.40	57.53		316.03
Meter maintenance	28.32	52.65	987.32	137.13	4,020.95
Consumers' premises expenses			206.38		260.34
Street lighting, operation and maintenance	159.80	156.30	1,375.43	138.60	806.76
Promotion of business		41.00	211.00	332.73	506.51
Billing and collecting	520.80	538.05	2,883.44	474.17	3,627.84
General office, salaries and expenses	154.35	323.70	3,469.89	693.85	9,693.21
Undistributed expenses	27.83	94.11	350.86	40.42	1,823.48
Truck operation and maintenance			923.66	145.55	1,551.58
Interest			2,227.81		12,630.39
Sinking fund and principal payments on debentures			4,779.66		11,031.94
Depreciation	865.00	1,081.00	9,504.00	871.00	13,227.53
Other reserves			439.62		
Total operating costs and fixed charges	8,578.80	14,087.33	119,062.23	14,234.01	164,663.30
Net surplus	1,503.07	816.83	10,255.06	864.68	17,506.37
Net loss					
NUMBER OF CONSUMERS					
Domestic service	230	336	1,905	280	2,418
Commercial light service	34	67	247	78	427
Power service	6	11	73	5	77
Total	270	414	2,225	363	2,922

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Wellesley	West Lorne	Weston	Wheatley	Windsor	Woodbridge	Woodstock
P.V.	752	5,040	723	98,745	811	10,936
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,826.73	2,943.88	45,617.74	4,236.99	800,687.22	6,576.86	75,853.82
1,498.62	1,387.51	10,330.10	2,730.36	328,346.29	1,986.55	39,394.67
1,904.90	1,659.23	42,198.49	1,675.71	442,098.56	5,319.84	57,631.84
....	....	524.68	481.07	21,468.04	391.73	2,948.20
695.00	1,014.05	7,260.51	1,368.00	100,499.37	915.82	8,279.40
....	....	....	....	....	....	2.36
16.47	29.75	998.64	92.36	3,585.75	72.74	4,620.64
6,941.72	7,034.42	106,930.16	10,584.49	1,696,685.23	15,263.54	188,730.93
4,480.17	4,135.44	80,110.33	6,298.76	980,505.58	10,790.79	137,184.79
....	....	164.92	....	28,628.72	....	2,543.56
....	....	....	....	6,081.04	....	11.75
323.93	214.41	4,754.94	397.92	34,447.96	230.68	4,868.03
8.78	6.90	55.13	85.77	3,869.07	10.89	38.50
265.52	180.80	395.70	224.83	22,974.58	44.77	1,420.61
....	....	150.00	....	46,649.20	....	....
59.68	79.94	817.28	293.12	37,283.87	103.00	2,136.05
....	....	....	59.86	35,634.26	18.50	1,720.42
....	437.90	763.77	396.97	56,017.65	....	3,174.19
443.70	172.85	2,932.19	197.26	45,930.80	762.64	6,385.18
50.99	2.05	434.53	56.75	26,798.48	....	1,395.19
....	....	294.55	....	....	....	684.23
37.02	3.25	1,727.75	379.93	59,602.20	251.03	2,339.82
616.86	....	3,531.13	708.83	126,794.90	342.39	928.00
351.00	671.00	5,333.00	662.00	103,795.00	898.00	13,214.00
....	25.76	....	....	....	....	....
6,637.65	5,930.30	101,465.22	9,762.00	1,615,013.31	13,452.69	178,044.32
304.07	1,104.12	5,464.94	822.49	81,671.92	1,810.85	10,686.61
....	....	....	....	....	....	....
123	188	1,284	178	23,766	256	3,001
48	49	178	71	3,152	50	459
6	5	27	3	460	7	93
177	242	1,489	252	27,378	313	3,553

STATEMENT

Detailed Operating Reports of Electrical Departments of

NIAGARA SYSTEM—Concluded

Municipality	Wyoming	*York Twp.	Zurich	NIAGARA SYSTEM SUMMARY
Population	504		P.V.	
EARNINGS	$ c.	$ c.	$ c.	$ c.
Domestic service	2,763.38	634,802.95	3,091.42	10,196,802.30
Commercial light service	1,698.11	75,346.26	2,258.38	5,559,246.35
Commercial power service	445.38	91,414.78		8,721,792.67
Municipal power		10,048.53		1,643,737.01
Street lighting	765.00	49,901.35	693.00	1,388,628.37
Merchandise				18,560.58
Miscellaneous	53.13	14,805.62	80.27	464,012.83
Total earnings	5,725.00	876,319.49	6,123.07	27,992,780.11
EXPENSES				
Power purchased	3,340.78	†815,639.03	3,985.92	16,542,445.21
Substation operation				393,554.84
Substation maintenance				288,627.28
Distribution system, operation and maintenance	195.01		420.27	663,382.08
Line transformer maintenance			9.25	60,626.59
Meter maintenance			4.50	262,878.13
Consumers' premises expenses				295,126.54
Street lighting, operation and maintenance	39.56		67.91	269,430.39
Promotion of business				259,339.53
Billing and collecting	192.00		213.52	777,990.31
General office, salaries and expenses	6.40		50.31	776,195.32
Undistributed expenses	15.00		17.31	309,575.83
Truck operation and maintenance				47,554.94
Interest		20,228.30	184.89	1,706,144.28
Sinking fund and principal payments on debentures		25,589.58	205.11	2,245,077.15
Depreciation	449.00	23,437.00	419.00	1,726,095.53
Other reserves				118,526.14
Total operating costs and fixed charges	4,237.75	884,893.91	5,577.99	26,742,570.09
Net surplus	1,487.25		545.08	1,250,210.02
Net loss		8,574.42		
NUMBER OF CONSUMERS				
Domestic service	137	20,507	121	379,367
Commercial light service	47	1,078	49	56,930
Power service	3	160		10,509
Total	187	21,745	170	446,806

*For year ended Dec. 31, 1935. Included in Toronto figures. Not added in summary.
†Toronto operating costs.

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

GEORGIAN BAY SYSTEM

Alliston 1,412	Arthur 1,052	Barrie 7,856	Beaverton 920	Beeton 585	Bradford 999	Brechin P.V.	Cannington 757
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
9,242.00	5,068.93	54,534.68	6,406.02	3,603.48	6,468.72	1,061.05	5,195.85
5,313.51	4,188.34	32,656.67	2,709.59	2,327.29	3,581.42	1,092.21	2,523.75
2,390.70	1,341.31	17,929.00	1,163.84	1,788.07	3,010.65	1,021.88	761.97
843.66	705.15	1,040.51	....	....	209.89	....	....
2,031.50	1,651.50	6,138.39	1,305.50	1,264.00	1,072.00	462.00	1,110.49
3.00	....	52.41	....	....	....	....	5.58
96.42	14.91	708.03	819.53	20.53	199.98	63.44	89.91
19,920.79	12,970.14	113,059.69	12,404.48	9,003.37	14,542.66	3,700.58	9.687.55
11,383.13	8,395.61	70,463.63	6,949.64	6,011.52	8,547.28	2,356.59	5,610.35
....	....	745.79	....	....	....	....	....
826.86	492.46	6,287.15	864.52	46.05	348.53	366.62	614.64
....	....	167.55	43.42	....	....	....	....
....	....	827.07	7.76	....	....	....	....
120.00	....	....	....	....	....	....	48.45
257.48	106.86	673.35	243.15	136.47	178.59	89.35	133.90
....	....	246.93	....	....	....	....	....
818.39	....	3,783.03	473.37	....	689.81	....	....
82.69	392.19	1,970.50	231.97	406.57	78.66	64.66	730.26
192.58	....	961.62	198.50	....	94.56	....	....
....	....	919.69	....	....	....	....	....
1,475.82	1,015.31	1,111.30	271.34	459.80	1,219.62	200.71	370.11
1,672.15	855.80	3,092.71	640.29	517.47	790.92	115.08	717.11
1,470.00	1,020.00	8,200.06	1,255.00	645.00	950.00	155.00	744.00
....	....	....	....	....	....	....	....
18,299.10	12,278.23	99,450.38	11,178.96	8,222.88	12,897.97	3,348.01	8,968.82
1,621.69	691.91	13,609.31	1,225.52	780.49	1,644.69	352.57	718.73
....	....	....	....	....	....	....	....
336	185	1,982	325	126	231	41	251
100	83	405	66	40	66	27	75
14	4	45	9	4	10	3	10
450	272	2,432	400	170	307	71	336

STATEMENT

Detailed Operating Reports of Electrical Departments of

GEORGIAN BAY SYSTEM—Continued

Municipality Population	Chatsworth 302	Chesley 1,759	Coldwater 617	Collingwood 5,749	Cookstown P.V.
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	1,824.87	8,870.03	2,725.73	26,385.93	2,200.67
Commercial light service	1,223.52	4,583.03	1,738.06	9,932.79	1,321.98
Commercial power service		7,569.78	4,301.22	13,043.71	780.84
Municipal power		908.63		1,316.99	
Street lighting	615.00	1,538.33	608.00	3,577.25	840.00
Merchandise		29.12			
Miscellaneous	32.65	426.93	213.62	957.99	100.22
Total earnings	3,696.04	23,925.85	9,586.63	55,214.66	5,243.71
EXPENSES					
Power purchased	2,518.28	17,410.37	8,122.77	41,712.03	2,590.94
Substation operation				93.40	
Substation maintenance					
Distribution system, operation and maintenance	210.82	917.64	503.38	240.96	128.40
Line transformer maintenance		64.00			
Meter maintenance		143.60		210.80	
Consumers' premises expenses		0.75	10.00		
Street lighting, operation and maintenance	48.92	346.13	48.81	551.40	102.05
Promotion of business		81.10		52.85	
Billing and collecting		517.81		2,087.33	202.57
General office, salaries and expenses	251.21	696.07	328.01	1,782.18	36.15
Undistributed expenses		12.99		743.28	7.68
Truck operation and maintenance		85.50		37.86	
Interest	95.86	55.21	167.84		341.68
Sinking fund and principal payments on debentures	411.07	400.07	313.84		387.43
Depreciation	280.00	1,346.00	599.00	4,201.00	557.00
Other reserves				200.00	
Total operating costs and fixed charges	3,816.16	22,077.24	10,093.65	51,913.09	4,353.90
Net surplus		1,848.61		3,301.57	889.81
Net loss	120.12		507.02		
NUMBER OF CONSUMERS					
Domestic service	83	425	136	1,310	99
Commercial light service	33	99	47	200	31
Power service		20	2	53	3
Total	116	544	185	1,563	133

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Creemore 649	Dundalk 646	Durham 1,823	Elmvale P.V.	Elmwood P.V.	Flesherton 469	Grand Valley 572	Gravenhurst 1,997
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
3,255.49	3,059.80	6,805.65	2,828.21	1,254.73	2,646.04	3,276.79	9,602.96
1,946.40	2,735.97	4,560.61	1,742.63	710.07	1,711.99	1,831.38	6,926.81
991.08	2,783.39	3,783.64	2,841.54	1,537.98	329.69	1,719.16	9,051.82
		653.73	144.28				690.41
711.00	1,230.00	1,940.68	685.00	529.00	608.00	884.00	2,093.00
		3.97					
41.35	156.92	379.98	153.83	68.24	116.67	148.28	417.47
6,945.32	9,966.08	18,128.26	8,395.49	4,100.02	5,412.39	7,859.61	28,782.47
4,807.35	6,486.86	11,041.74	5,539.29	2,541.51	3,195.53	5,501.78	15,410.41
276.02	673.07	373.77	637.57	54.50	44.77	239.77	2,127.91
		40.30					17.92
		216.77					201.67
43.56	105.29	203.30	93.62	12.00	31.26	126.22	267.57
		80.00			100.00		262.71
		1,217.57					1,074.97
199.95	702.33	635.34	305.59	188.73	383.43	555.18	309.70
		102.96					619.31
		263.13					184.95
		26.65	131.74	103.00	390.52	55.74	563.98
		411.22	323.62	531.00	297.83	904.74	466.17
435.00	486.00	1,253.00	689.00	267.00	364.00	588.00	1,820.00
							229.48
5,761.88	8,453.55	15,865.75	7,720.43	3,697.74	4,807.34	7,971.43	23,556.75
1,183.44	1,512.53	2,262.51	675.06	402.28	605.05		5,225.72
						111.82	
142	170	418	159	63	138	159	510
55	72	106	59	20	48	50	118
2	4	11	7	1	2	5	15
199	246	535	225	84	188	214	643

STATEMENT

Detailed Operating Reports of Electrical Departments of

GEORGIAN BAY SYSTEM—Continued

Municipality	Hanover	Holstein	Huntsville	Kincardine	Kirkfield
Population	3,056	P.V.	2,718	2,468	P.V.
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c
Domestic service	18,912.29	1,215.41	11,946.41	15,228.57	781.63
Commercial light service	6,857.13	563.40	9,253.53	7,433.86	1,181.88
Commercial power service	18,908.03	110.93	12,283.77	9,886.72	
Municipal power	296.81		1,400.00	1,407.30	
Street lighting	2,917.08	350.00	2,473.05	4,322.50	480.00
Merchandise					
Miscellaneous	1,490.00	67.39	1,159.53	111.75	
Total earnings	49,381.34	2,307.13	38,516.29	38,390.70	2,443.51
EXPENSES					
Power purchased	31,491.59	1,318.99	22,968.61	26,682.05	1,322.57
Substation operation					
Substation maintenance				317.46	
Distribution system, operation and maintenance	1,953.19	2.81	2,045.69	1,513.12	187.26
Line transformer maintenance	131.78		15.00	32.66	
Meter maintenance	240.06		438.80	236.54	
Consumers' premises expenses			139.96		
Street lighting, operation and maintenance	368.06	17.28	488.52	392.40	44.52
Promotion of business			207.32	111.29	
Billing and collecting	1,155.11		1,483.14	756.66	
General office, salaries and expenses	794.30	179.34	754.50	876.35	95.50
Undistributed expenses	380.35		789.42	182.45	
Truck operation and maintenance	178.18		122.93	177.37	
Interest	1,337.01		54.38	1,411.83	197.07
Sinking fund and principal payments on debentures	6,291.68		207.18	3,756.47	390.87
Depreciation	3,611.00	122.00	1,250.00	2,381.00	230.00
Other reserves			946.01		
Total operating costs and fixed charges	47,932.31	1,640.42	31,911.46	38,827.65	2,467.79
Net surplus	1,449.03	666.71	6,604.83		
Net loss				436.95	24.28
NUMBER OF CONSUMERS					
Domestic service	724	56	608	646	29
Commercial light service	121	18	130	121	18
Power service	23	1	13	20	
Total	868	75	751	787	47

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Lucknow 1,062	Markdale 791	Meaford 2,762	Midland 6,845	Mildmay 755	Mount Forest 1,743	Neustadt 484	Orangeville 2,792
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
6,666.81	3,699.56	11,819.85	35,659.11	2,812.62	8,377.09	1,853.50	15,523.71
3,261.27	2,553.78	6,936.27	15,144.62	1,990.89	6,216.20	1,168.13	9,654.06
4,464.32	998.46	6,735.92	49,362.60	972.11	4,064.26	31.62	5,754.15
485.02	30.00	881.87	2,898.79	......	965.56	......	1,197.79
1,575.00	900.00	2,966.13	6,376.00	761.00	2,251.00	975.00	3,014.04
......	......	0.78	......	......	......	......	52.39
213.20	78.55	871.83	1,789.31	113.15	242.92	149.73	379.57
16,665.62	8.260.35	30,212.65	111,230.43	6,649.77	22,117.03	4,177.98	35,575.71
11,905.67	5,566.97	19,736.53	75,485.00	3,472.46	15,277.75	1,628.88	22,765.82
......	......	......	1,850.91	......	......	......	......
......	......	......	222.92	......	......	......	......
445.14	276.83	2,185.46	3,637.29	131.62	632.89	110.00	1,296.71
......	......	47.96	159.84	......	......	......	......
......	......	274.06	1,225.01	74.67	158.65	......	246.09
......	......	......	30.65	......	......	......	......
107.16	93.35	480.28	1,176.11	85.65	353.29	82.60	374.07
......	......	......	368.07	......	......	......	......
......	......	788.83	2,806.20	......	643.75	......	1,285.56
1,169.07	442.55	542.51	1,611.10	384.06	109.28	226.07	193.97
......	......	415.40	1,423.98	......	45.22	......	65.76
......	......	158.51	378.64	......	38.43	......	......
517.45	290.06	1,732.04	1,414.98	599.22	562.18	252.38	312.35
1,138.43	365.10	3,544.15	4,377.78	472.61	745.85	1,153.39	2,677.89
842.00	640.00	1,531.00	10,650.00	240.00	1,482.00	627.00	2,183.00
......	......	......	......	......	......	......	......
16,124.92	7,674.86	31,436.73	106,818.48	5,460.29	20,049.29	4,080.32	31,401.22
540.70	585.49	......	4,411.95	1,189.48	2,067.74	97.66	4,174.49
......	......	1,224.08	......	......	......	......	......
279	202	665	1,561	149	468	90	680
86	80	145	215	44	147	24	159
6	10	19	59	3	14	1	26
371	292	829	1,835	196	629	115	865

STATEMENT

Detailed Operating Reports of Electrical Departments of

GEORGIAN BAY SYSTEM—Continued

Municipality Population	Owen Sound 13,139	Paisley 752	Penetanguishene 3,989	Port Elgin 1,270	Port McNicoll 935
Earnings	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	61,477.56	3,762.60	12,278.02	7,372.51	3,200.33
Commercial light service	37,233.64	2,608.32	5,792.74	4,323.16	686.61
Commercial power service	42,696.94	1,017.46	13,396.10	3,337.41	
Municipal power			2,581.98	807.89	
Street lighting	12,963.10	1,260.00	2,239.00	2,317.34	1,048.00
Merchandise	342.04				
Miscellaneous	1,594.70	193.87	164.45	533.52	6.37
Total earnings	156,307.98	8,842.25	36,452.29	18,691.83	4,941.31
Expenses					
Power purchased	101,496.26	5,896.82	21,500.29	11,195.14	2,734.05
Substation operation			10.05		
Substation maintenance	4,031.67				
Distribution system, operation and maintenance	5,401.96	232.26	2,097.22	907.28	418.88
Line transformer maintenance	553.73		102.11	13.70	
Meter maintenance	2,761.20		122.80	69.42	
Consumers' premises expenses			1.65		
Street lighting, operation and maintenance	1,811.70	96.29	260.68	271.65	107.82
Promotion of business			39.52		
Billing and collecting	5,991.01		944.96	655.67	
General office, salaries and expenses	5,470.91	488.23	565.17	228.94	314.00
Undistributed expenses	2,309.27		228.70	34.26	
Truck operation and maintenance	1,066.03		165.48	134.85	
Interest		466.46	738.24	1,763.82	68.06
Sinking fund and principal payments on debentures		872.41	1,904.94	1,621.14	143.05
Depreciation	7,600.00	565.00	3,026.00	977.00	449.00
Other reserves					
Total operating costs and fixed charges	138,493.74	8,617.47	31,707.81	17,872.87	4,234.86
Net surplus	17,814.24	224.78	4,744.48	818.96	706.45
Net loss					
Number of Consumers					
Domestic service	3,263	182	590	403	209
Commercial light service	561	51	99	100	25
Power service	105	4	27	9	
Total	3,929	237	716	512	234

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Port Perry 1,125	Priceville P.V.	Ripley 454	Rosseau 305	Shelburne 1,102	Southampton 1,321	Stayner 1,008	Sunderland P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
6,508.26	663.91	3,171.01	3,270.74	5,578.95	7,530.59	4,658.16	2,443.77
3,120.54	285.18	1,505.39	846.82	3,698.14	3,022.75	3,061.29	1,728.54
3,003.21				2,171.34	2,282.31	2,430.86	132.68
352.01				607.94	1,200.11		
1,470.00	560.00	1,070.00	1,239.00	1,056.00	2,318.88	1,284.00	720.00
593.55	12.85	16.95	21.41	228.13	55.82	354.02	178.49
15,047.57	1,521.94	5,763.35	5,377.97	13,340.50	16,410.46	11,788.33	5,203.48
10,655.62	756.81	3,625.41	3,042.82	9,049.48	8,821.22	7,563.66	3,210.83
1,107.06	33.10	3.29	160.06	637.98	1,102.06	621.11	239.01
					11.66		
					97.56		
80.71	28.14	20.58	71.13	192.33	245.41	190.12	65.38
			203.56	472.55	791.88	569.50	
780.89	52.71	468.03	58.17	164.81	391.55	18.99	292.33
					64.85	187.32	
					79.25		
799.74	132.49	575.83	756.33	139.70	1,024.71	47.00	139.03
890.29	390.90	454.72	367.42	328.49	1,273.73	411.67	260.04
922.00	194.00	473.00	254.00	1,058.00	862.00	994.00	319.00
15,236.31	1,588.15	5,620.86	4,913.49	12,043.34	14,765.88	10,603.37	4,525.62
		142.49	464.48	1,297.16	1,644.58	1,184.96	677.86
188.74	66.21						
304	31	120	62	281	423	257	119
75	9	46	21	83	78	87	46
11				14	9	10	2
390	40	166	83	378	510	354	167

STATEMENT

Detailed Operating Reports of Electrical Departments of

GEORGIAN BAY SYSTEM—Concluded

Municipality	Tara	Teeswater	Thornton	Tottenham	Uxbridge
Population	509	837	P.V.	539	1,451
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	2,762.15	4,393.72	1,324.85	3,290.03	8,414.29
Commercial light service	1,638.33	2,654.47	540.59	1,793.45	3,831.22
Commercial power service	1,154.75	1,232.78	318.50	361.51	923.07
Municipal power		180.00		194.06	
Street lighting	1,005.35	1,332.40	880.00	1,225.08	2,118.88
Merchandise					
Miscellaneous	29.45	107.81	6.71		522.01
Total earnings	6,590.03	9,901.18	3,070.65	6,864.13	15,809.47
EXPENSES					
Power purchased	3,318.15	5,596.48	1,389.34	4,637.36	9,845.92
Substation operation					
Substation maintenance					
Distribution system, operation and maintenance	107.18	65.99	37.45	331.31	723.03
Line transformer maintenance					
Meter maintenance					
Consumers' premises expenses					
Street lighting, operation and maintenance	164.79	104.79	29.67	60.00	206.07
Promotion of business					
Billing and collecting					
General office, salaries and expenses	618.89	575.54	80.26	203.35	824.02
Undistributed expenses					
Truck operation and maintenance					
Interest	190.78	628.27	196.47	454.60	
Sinking fund and principal payments on debentures	1,107.09	1,368.37	506.18	347.72	
Depreciation	593.00	768.00	351.00	465.00	730.00
Other reserves					
Total operating costs and fixed charges	6,099.88	9,107.44	2,590.37	6,499.34	12,329.04
Net surplus	490.15	793.74	480.28	364.79	3,480.43
Net loss					
NUMBER OF CONSUMERS					
Domestic service	135	204	59	130	378
Commercial light service	37	58	12	51	95
Power service	4	6	2	7	10
Total	176	268	73	188	483

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Victoria Harbor 1,077	Walkerton 2,428	Waubaushene P.V.	Wiarton 1,715	Windermere 153	Wingham 1,987	Woodville 390	GEORGIAN BAY SYSTEM SUMMARY
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
3,091.87	13,673.28	2,450.52	8,763.38	2,622.56	12,002.35	2,137.07	487,656.67
867.49	8,048.17	630.45	6,967.76	1,083.76	6,911.13	1,227.82	271,680.80
44.77	3,996.74	83.16	2,967.19		9,471.72	734.65	283,471.31
117.47	625.19	98.46	1,608.47		534.80		24,984.77
702.00	2,586.00	464.00	2,305.32	455.00	3,332.33	626.04	106,833.16
	520.12				495.75		1,505.16
5.99	81.47	95.93	314.86	9.47	411.26	216.90	17,649.82
4,829.59	29,530.97	3,822.52	22,926.98	4,170.79	33,159.34	4,942.48	1,193,781.69
2,847.47	15,747.59	2,195.89	12,835.56	1,981.20	17,389.79	2,655.55	756,208.21
					1,555.47		3,509.83
							5,317.84
76.80	1,548.20	219.63	530.09	61.91	2,941.50	312.76	50,610.54
	217.09				145.00		1,763.72
	427.79		99.29		105.71		8,185.32
	50.89	1.00					403.35
41.28	660.08	83.15	207.64	22.62	342.45	77.45	13,304.50
	126.98						1,676.77
	1,165.31		1,154.20	147.42	572.05		32,452.21
397.12	1,399.46	309.22	209.70	20.35	1,092.01	303.68	33,038.30
	151.44		57.81	16.01	304.04		9,589.76
	330.36		186.72		44.89		4,552.77
	2,739.40	1.50	1,691.72	619.15	2,052.22	132.45	32,095.15
	2,315.88		1,309.35	444.11	1,652.42	273.56	56,213.40
452.00	1,486.00	340.00	858.00	330.00	3,110.00	247.00	80,536.06
							1,375.49
3,814.67	28,366.47	3,150.39	19,140.08	3,642.77	31,307.55	4,002.45	1,090,833.22
1,014.92	1,164.50	672.13	3,786.90	528.02	1,851.79	940.03	102,948.47
191	544	161	368	49	535	112	22,556
31	136	23	115	12	142	32	5,133
2	17	3	16		24	2	703
224	697	187	499	61	701	146	28,392

STATEMENT

Detailed Operating Reports of Electrical Departments of

EASTERN ONTARIO SYSTEM

Municipality	Alexandria	Apple Hill	Athens	Bath	Belleville
Population	1,931	P.V.	626	360	14,411
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	7,362.03	1,257.58	2,991.62	1,412.87	78,403.29
Commercial light service	5,126.81	933.90	1,317.09	906.84	51,037.72
Commercial power service	2,890.02	273.86	1,139.57		37,733.62
Municipal power	808.03				6,328.97
Street lighting	2,360.00	528.00	1,055.00	714.00	10,170.25
Merchandise					
Miscellaneous	271.38	4.53	127.60		7,630.18
Total earnings	18,818.27	2,997.87	6,630.88	3,033.71	191,304.03
EXPENSES					
Power purchased	10,183.42	1,554.33	3,855.32	1,990.28	127,354.03
Substation operation					
Substation maintenance					
Distribution system, operation and maintenance	567.00	67.30	203.59	36.37	2,819.95
Line transformer maintenance	115.35				484.37
Meter maintenance	161.20	15.76	46.12		1,273.55
Consumers' premises expenses					151.45
Street lighting, operation and maintenance	178.90	50.88	88.65	2.96	1,547.91
Promotion of business					2,437.45
Billing and collecting	875.18				4,469.93
General office, salaries and expenses	322.01	252.62	193.36	100.08	7,968.62
Undistributed expenses	51.78		2.25		1,428.56
Truck operation and maintenance					225.16
Interest	905.60	161.10	603.56	425.96	
Sinking fund and principal payments on debentures	2,605.98	362.00	584.07	252.57	
Depreciation	1,442.00	180.00	505.00	190.00	6,141.00
Other reserves					
Total operating costs and fixed charges	17,408.42	2,643.99	6,081.92	2,998.22	156,301.98
Net surplus	1,409.85	353.88	548.96	35.49	35,002.05
Net loss					
NUMBER OF CONSUMERS					
Domestic service	316	49	163	33	3,129
Commercial light service	103	21	44	18	678
Power service	15	1	1		109
Total	434	71	208	51	3,916

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Bloomfield 669	Bowmanville 3,631	Brighton 1,374	Brockville 9,874	Cardinal 1,148	Carleton Place 4,250	Chesterville 1,074	Cobden 641
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
3,329.82	27,356.14	9,386.39	50,687.29	6,882.18	18,664.15	5,656.44	2,442.26
1,411.00	9,196.36	4,636.19	25,527.68	1,916.92	9,858.69	3,231.78	2,792.07
634.50	50,855.91	2,565.43	30,322.21	536.64	27,597.84	2,471.49	404.94
			4,794.96		1,659.87		
720.22	3,158.81	2,191.92	8,453.50	937.00	4,800.75	1,032.00	1,120.00
					17.37	89.34	
47.92	1,066.53	189.37	6,640.96	117.24	1,757.09	467.27	24.94
6,143.46	91,633.75	18,969.30	126,426.60	10,389.98	64,355.76	12,948.32	6,784.21
3,364.40	59,641.53	8,013.39	75,170.73	5,185.47	37,172.85	7,063.07	3,402.08
			5,160.00				
			441.77		171.51		
67.97	2,527.96	2,085.18	2,676.09	1,258.15	1,760.80	820.01	37.82
	76.73	95.44	45.80		69.08		
9.56	929.77	164.90	1,783.76	151.22	528.32	45.30	8.75
	4.55	96.65	326.84	0.25	2.08		
57.53	401.83	264.80	1,517.35	158.60	511.87	102.08	124.17
	346.26	267.96	308.90		447.90		
	2,085.64	834.38	2,266.22		1,551.81	386.55	281.15
201.99	2,160.08	1,516.74	5,518.14	562.89	3,812.32	448.85	95.03
	954.47	501.83	829.07	14.04	187.30		15.62
		452.54	287.02		476.97		
369.80	1,875.46	967.08		635.75	2,302.78	126.84	442.32
480.95	2,654.26	978.99		578.96	2,869.97	224.16	457.68
549.00	1,960.00	648.00	9,101.00	428.00	2,307.00	655.00	115.00
			3,000.00		200.00		
5,101.20	75,618.54	16,887.88	108,432.69	8,973.33	54,372.56	9,871.86	4,979.62
1,042.26	16,015.21	2,081.42	17,993.91	1,416.65	9,983.20	3,076.46	1,804.59
162	1,080	489	2,723	345	968	227	98
28	179	93	448	57	188	69	50
5	30	10	72	2	19	4	1
195	1,289	592	3,243	404	1,175	300	149

STATEMENT

Detailed Operating Reports of Electrical Departments of

EASTERN ONTARIO SYSTEM—Continued

Municipality	Cobourg	Colborne	Deseronto	Finch	Hastings
Population	5,837	986	1,363	368	817
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	28,708.79	5,237.91	5,782.26	2,059.40	4,021.17
Commercial light service	18,389.81	3,323.63	2,328.23	1,532.62	1,830.40
Commercial power service	24,202.44	584.72	1,242.49	348.55	268.02
Municipal power	2,934.62	249.45	693.16	....	....
Street lighting	5,653.04	1,405.88	1,445.33	494.00	1,164.01
Merchandise	....	....	....	....	....
Miscellaneous	2,311.58	193.56	158.00	146.22	423.09
Total earnings	82,200.28	10,995.15	11,649.47	4,580.79	7,706.69
EXPENSES					
Power purchased	44,620.13	4,455.84	5,710.93	2,712.83	3,667.57
Substation operation	....	....	....	....	....
Substation maintenance	....	....	....	....	....
Distribution system, operation and maintenance	3,054.29	1,169.07	1,106.78	93.73	536.56
Line transformer maintenance	381.97	31.36	....	....	22.20
Meter maintenance	1,127.79	89.18	201.56	1.30	5.35
Consumers' premises expenses	175.06	....	....	....	....
Street lighting, operation and maintenance	1,480.99	164.16	362.05	24.14	87.09
Promotion of business	932.01	55.97	97.73	....	....
Billing and collecting	3,017.92	....	289.27	....	232.80
General office, salaries and expenses	3,544.37	1,248.37	765.78	259.84	128.31
Undistributed expenses	1,222.40	....	59.69	....	35.29
Truck operation and maintenance	534.98	265.56	75.67	....	....
Interest	4,453.24	707.52	278.27	306.99	1,011.80
Sinking fund and principal payments on debentures	3,782.76	458.17	560.76	303.30	746.10
Depreciation	2,645.00	308.00	408.00	282.00	508.00
Other reserves	....	....	....	....	....
Total operating costs and fixed charges	70,972.91	8,953.20	9,916.49	3,984.13	6,981.07
Net surplus	11,227.37	2,041.95	1,732.98	596.66	725.62
Net loss	....	....	....	....	....
NUMBER OF CONSUMERS					
Domestic service	1,245	232	288	84	192
Commercial light service	294	73	65	34	53
Power service	51	5	8	1	4
Total	1,590	310	361	119	249

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Havelock	Kemptville	Kingston	Lakefield	Lanark	Lancaster	Lindsay
1,161	1,330	24,173	1,374	673	602	6,949
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
5,527.21	7,030.92	126,445.96	6,229.34	2,912.93	2,174.26	41,473.05
2,654.12	4,338.47	84,172.01	3,891.35	1,305.01	1,877.32	26,888.95
2,555.97	5,323.23	97,860.10	2,969.90	....	....	28,417.69
....	....	9,033.99	....	....	....	3,037.09
1,533.00	1,712.00	22,297.00	1,873.06	570.00	902.00	6,404.96
....	....	....	....	....	....	....
536.68	1,029.60	2,887.83	489.79	126.14	62.21	4,357.97
12,806.98	19,434.22	342,696.89	15,453.44	4,914.08	5,015.79	110,579.71
6,317.82	11,203.39	185,457.45	8,672.69	2,937.26	2,624.03	66,530.87
....	....	5,148.00	....	....	....	....
....	....	4,301.95	....	....	....	....
770.35	661.51	16,737.63	885.05	278.12	62.05	3,356.47
....	20.27	481.21	7.20	....	....	878.91
43.47	415.19	4,730.32	80.00	33.57	28.95	1,170.62
....	....	1,912.51	....	....	....	473.28
84.12	186.22	2,574.61	152.14	59.73	55.06	1,754.68
....	518.01	438.77	....	....	....	....
....	1,047.43	5,913.37	480.98	....	....	2,736.89
479.48	312.36	13,575.26	495.03	372.15	307.53	6,291.41
....	110.63	7,931.85	88.34	....	....	1,486.32
231.34	185.24	2,978.48	....	....	....	....
753.63	1,014.44	3,585.23	1,567.89	147.38	105.46	4,761.11
2,114.74	757.85	6,624.50	997.47	553.16	846.95	5,532.06
921.00	1,038.00	22,980.00	1,263.00	297.00	311.00	4,046.00
....	....	37,500.00	....	....	....	....
11,715.95	17,470.54	322,871.14	14,689.79	4,678.37	4,341.03	99,018.62
1,091.03	1,963.68	19,825.75	763.65	235.71	674.76	11,561.09
....	....	....	....	....	....	....
288	334	5,900	319	159	83	1,887
60	87	875	70	35	35	336
3	8	143	7	....	....	71
351	429	6,918	396	194	118	2,294

STATEMENT

Detailed Operating Reports of Electrical Departments of

EASTERN ONTARIO SYSTEM—Continued

Municipality Population	Madoc 1,253	Marmora 986	Martintown P.V.	Maxville 699	Napanee 3,013
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c
Domestic service	4,515.58	3,761.43	849.80	3,643.62	24,699.57
Commercial light service	3,305.46	1,894.65	1,007.20	2,752.91	14,141.44
Commercial power service	1,255.15	355.58			11,436.14
Municipal power					879.00
Street lighting	1,500.00	1,361.00	270.00	1,170.00	4,191.00
Merchandise					
Miscellaneous	66.80	78.71	9.76	45.12	2,320.40
Total earnings	10,642.99	7,451.37	2,136.76	7,611.65	57,667.55
EXPENSES					
Power purchased	6,440.14	3,793.60	1,172.55	4,299.48	30,440.50
Substation operation					
Substation maintenance					
Distribution system, operation and maintenance	890.70	261.78	58.75	412.07	2,984.09
Line transformer maintenance	102.49				75.64
Meter maintenance	72.28		22.37	19.65	673.74
Consumers' premises expenses				25.00	69.13
Street lighting, operation and maintenance	65.49	104.04	17.50	128.65	371.92
Promotion of business					492.21
Billing and collecting					1,588.95
General office, salaries and expenses	1,029.81	618.91	156.65	303.55	4,522.64
Undistributed expenses					1,522.60
Truck operation and maintenance					
Interest		401.12		317.10	840.06
Sinking fund and principal payments on debentures		870.66		1,024.41	2,741.20
Depreciation	426.00	614.00	151.00	530.00	1,669.00
Other reserves					
Total operating costs and fixed charges	9,026.91	6,664.11	1,578.82	7,059.91	47,991.68
Net surplus	1,616.08	787.26	557.94	551.74	9,675.87
Net loss					
NUMBER OF CONSUMERS					
Domestic service	276	206	42	145	778
Commercial light service	87	47	22	49	196
Power service	6	3			31
Total	369	256	64	194	1,005

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Norwood	Omemee	Oshawa	Ottawa	Perth	Peterborough	Picton
753	588	24,097	140,316	4,215	22,973	3,560
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
4,525.06	2,592.53	173,863.62	482,755.62	23,396.42	136,160.84	23,157.64
2,175.37	1,648.46	65,992.19	177,323.68	14,648.69	71,979.57	14,755.08
703.27	2,585.60	234,908.93	54,344.34	15,134.90	95,783.87	5,663.51
....	....	8,496.08	20,533.27	1,847.49	7,062.07	2,045.14
1,587.00	995.59	11,868.57	76,546.33	2,387.60	21,984.79	3,101.35
....	....	....	....	1,924.45	....	1,004.37
589.92	....	8,054.75	4,335.75	3,435.11	788.65	1,782.54
9,580.62	7,822.18	503,184.14	815,838.99	62,774.66	333,759.79	51,509.63
3,380.98	4,470.33	386,134.89	389,460.47	36,576.63	195,130.63	32,977.79
....	....	....	28,017.11	389.57	6,801.75	....
....	....	....	785.71	....	309.27	....
500.17	365.18	4,786.59	24,749.15	1,774.94	5,287.20	2,359.12
....	....	421.41	2,866.41	195.54	1,089.15	53.03
17.83	6.65	3,475.78	10,380.33	346.54	5,952.88	230.72
....	....	887.96	3,998.00	278.18	1,058.65	....
46.52	62.65	2,108.93	29,953.65	394.26	5,026.83	582.64
....	....	2,553.56	10,784.68	....	1,076.68	194.83
....	....	8,653.50	43,691.70	1,702.83	6,488.25	1,208.57
426.78	251.33	7,343.29	30,938.02	3,499.74	6,487.89	2,725.94
....	47.22	5,070.10	15,043.59	259.90	5,155.87	275.51
252.59	....	....	2,459.70	370.56	2,834.15	260.68
1,531.23	84.05	10,783.60	32,449.03	3,090.66	27,023.03	....
1,222.21	905.51	12,716.10	18,487.92	2,166.63	14,263.54	....
1,113.00	639.00	10,758.00	80,778.00	3,646.00	17,608.00	2,196.00
....	....	....	....	300.00	500.00	....
8,491.31	6,831.92	455,693.71	724,843.47	54,991.98	302,093.77	43,064.83
1,089.31	990.26	47,490.43	90,995.52	7,782.68	31,666.02	8,444.80
....	....	....	....	....	....	....
214	140	6,136	13,367	995	5,441	1,010
58	44	530	1,362	204	877	194
2	6	103	192	24	150	34
274	190	6,769	14,921	1,223	6,468	1,238

STATEMENT

Detailed Operating Reports of Electrical Departments of

EASTERN ONTARIO SYSTEM—Continued

Municipality	Port Hope	Prescott	Richmond	Russell	Smiths Falls
Population	4,320	2,942	420	P.V.	7,539
EARNINGS	$ c.	$ c.	$ c.	$ c.	$ c.
Domestic service	29,081.87	16,976.33	1,803.38	2,633.67	42,078.97
Commercial light service	12,676.94	9,007.78	1,800.79	1,405.60	15,879.23
Commercial power service	28,100.00	3,812.32			25,820.57
Municipal power	1,282.03	1,694.71			225.00
Street lighting	4,312.16	3,475.00	416.04	752.00	7,468.04
Merchandise					15.95
Miscellaneous	622.90	258.55	1.26	85.14	3,431.78
Total earnings	76,075.90	35,224.69	4,021.47	4,876.41	94,919.54
EXPENSES					
Power purchased	44,606.46	21,998.45	2,326.10	2,411.67	47,201.45
Substation operation		1,358.50			586.95
Substation maintenance					25.23
Distribution system, operation and maintenance	2,227.80	1,939.67	64.11	257.60	3,864.30
Line transformer maintenance	72.17	12.85			128.98
Meter maintenance	1,118.71	151.42	11.00	6.55	1,003.94
Consumers' premises expenses		33.30			
Street lighting, operation and maintenance	987.60	577.93	15.75	77.43	686.85
Promotion of business					1,514.85
Billing and collecting	1,628.74	1,198.03			2,765.61
General office, salaries and expenses	3,430.46	2,114.51	193.38	351.40	2,455.45
Undistributed expenses	915.52	360.70			492.97
Truck operation and maintenance	350.89				431.80
Interest			301.85	352.94	2,548.50
Sinking fund and principal payments on debentures			265.68	489.88	14,688.64
Depreciation	2,193.00	2,959.00	223.00	307.00	6,343.00
Other reserves					500.00
Total operating costs and fixed charges	57,531.35	32,704.36	3,400.87	4,254.47	85,238.52
Net surplus	18,544.55	2,520.33	620.60	621.94	9,681.02
Net loss					
NUMBER OF CONSUMERS					
Domestic service	1,242	692	59	113	1,930
Commercial light service	205	164	25	33	269
Power service	43	18			44
Total	1,490	874	84	146	2,243

"B"—Continued

Hydro Municipalities for Year Ended December 31, 1936

Stirling 965	Trenton 6,541	Tweed 1,276	Wark-worth P.V.	Wellington 920	Westport 709	Whitby 3,751	Williams-burg P.V.
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
5,387.20	27,209.22	5,873.14	2,302.50	5,157.16	3,113.90	20,653.54	3,722.56
3,531.46	18,008.53	4,475.02	1,721.72	1,996.76	2,901.65	10,317.85	6,156.10
1,536.54	66,932.52	2,734.76	....	2,156.09	....	14,650.99	205.09
265.02	1,893.04	219.22	....	....	....	1,897.95	....
1,614.96	7,172.98	1,843.75	632.04	955.00	1,256.68	4,049.56	240.00
....	....	....	....	....	....	....	....
437.25	2,823.89	409.15	147.29	267.98	137.07	2,349.94	402.77
12,772.43	124,040.18	15,555.04	4,803.55	10,532.99	7,409.30	53,919.83	10,726.52
6,874.88	71,081.88	9,095.62	2,632.98	6,522.16	4,299.65	30,401.65	5,299.85
183.55	....	....	....	....	....	136.77	
....	77.32	....	....	....	....	....	....
698.35	2,151.73	1,040.23	32.14	869.72	400.62	2,663.90	377.32
34.08	121.15	64.00	....	....	38.37	105.46	....
66.97	1,415.93	276.03	31.21	70.48	44.79	744.28	20.20
....	221.70	....	....	0.30	....	19.84	15.13
167.75	556.26	387.29	19.25	173.98	102.30	614.83	45.43
....	39.31	....	....	....	....	623.58	....
495.88	2,804.09	576.31	....	....	....	1,230.85	....
1,070.44	4,927.59	794.50	207.93	629.13	699.00	2,175.65	830.22
55.99	1,660.19	86.36	....	36.00	17.73	367.53	....
288.61	....	....	....	....	53.45	....	....
....	4,792.58	419.68	535.01	673.93	684.72	1,766.83	....
....	6,168.33	744.03	264.13	773.11	532.93	2,587.18	....
897.00	4,290.00	509.00	329.00	770.00	230.00	3,218.15	242.00
....	....	50.00	....	....	....	....	100.00
10,833.50	100,308.06	14,043.05	4,051.65	10,518.81	7,103.56	46,656.50	6,930.15
1,938.93	23,732.12	1,511.99	751.90	14.18	305.74	7,263.33	3,796.37
....	....	....	....	....	....	....	....
278	1,350	275	106	299	100	859	118
86	257	96	48	62	55	158	60
9	50	11	....	5	....	20	1
373	1,657	382	154	366	155	1,037	179

STATEMENT

Detailed Operating Reports of Electrical Departments of

	EASTERN ONTARIO SYSTEM—Concluded		THUNDER BAY SYSTEM	
Municipality	Winchester	EASTERN ONTARIO SYSTEM SUMMARY	Fort William	Nipigon
Population	1,057		24,371	
EARNINGS	$ c.	$ c.	$ c.	$ c.
Domestic service	6,744.84	1,510,095.27	199,114.34	2,847.93
Commercial light service	3,452.19	735,381.29	65,055.76	2,119.01
Commercial power service	1,435.02	890,754.33	45,797.93	209.75
Municipal power		77,880.16	23,740.84	598.06
Street lighting	1,062.00	244,909.17	17,960.57	432.00
Merchandise	41.54	3,093.02		
Miscellaneous	411.71	64,361.87	7,147.43	84.06
Total earnings	13,147.30	3,526,475.11	358,816.87	6,290.81
EXPENSES				
Power purchased	8,250.35	2,046,142.85	228,005.59	2,609.22
Substation operation		47,782.20	7,283.52	
Substation maintenance		6,112.76	468.62	
Distribution system, operation and maintenance	369.40	105,026.43	11,887.65	247.76
Line transformer maintenance		8,090.62	822.25	
Meter maintenance	95.14	39,300.93	7,106.70	113.22
Consumers' premises expenses		9,749.86	88.38	
Street lighting, operation and maintenance	74.99	55,343.24	6,309.01	67.14
Promotion of business		23,130.66	1,915.62	
Billing and collecting	455.67	100,958.50	10,938.86	
General office, salaries and expenses	326.48	129,443.31	5,239.53	708.75
Undistributed expenses		46,287.22	3,573.19	89.10
Truck operation and maintenance		13,015.39	1,655.72	
Interest	317.04	116,422.17	14,900.41	355.82
Sinking fund and principal payments on debentures	457.92	116,697.42	7,943.17	516.04
Depreciation	656.00	202,522.15	13,395.00	566.00
Other reserves		42,150.00	1,892.56	
Total operating costs and fixed charges	11,002.99	3,108,175.71	323,425.78	5,273.05
Net surplus	2,144.31	418,299.40	35,391.09	1,017.76
Net loss				
NUMBER OF CONSUMERS				
Domestic service	284	57,248	5,466	147
Commercial light service	72	9,253	894	37
Power service	3	1,325	101	2
Total	359	67,826	6,461	186

"B"—Concluded

Hydro Municipalities for Year Ended December 31, 1936

NORTHERN ONTARIO PROPERTIES
SUDBURY DISTRICT

Port Arthur 20,352	THUNDER BAY SYSTEM SUMMARY	Capreol 1,750	Sudbury 20,079	SUDBURY DISTRICT SUMMARY	ALL SYSTEMS GRAND SUMMARY
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
111,852.83	313,815.10	8,901.72	164,869.12	173,770.84	12,682,140.18
56,095.05	123,269.82	3,412.41	122,448.49	125,860.90	6,815,439.16
716,970.34	762,978.02	....	35,196.11	35,196.11	10,694,192.44
34,784.55	59,123.45	685.07	11,576.48	12,261.55	1,817,986.94
18,984.96	37,377.53	1,920.00	19,752.64	21,672.64	1,799,420.87
....	....	....	....	....	23,158.76
21,274.10	28,505.59	....	1,295.38	1,295.38	575,825.49
959,961.83	1,325,069.51	14,919.20	355,138.22	370,057.42	34,408,163.84
750,577.01	981,191.82	5,629.90	154,964.66	160,594.56	20,486,582.65
22,641.03	29,924.55	494.58	3,589.71	4,084.29	478,855.71
1,370.74	1,839.36	....	....	....	301,897.24
13,960.34	26,095.75	963.12	9,498.10	10,461.22	855,576.02
851.84	1,674.09	....	556.65	556.65	72,711.67
5,999.43	13,219.35	11.95	4,815.22	4,827.17	328,410.90
....	88.38	....	1,276.67	1,276.67	306,644.80
7,557.21	13,933.36	429.45	4,491.07	4,920.52	356,932.01
2,276.35	4,191.97	....	....	....	288,338.93
10,105.13	21,043.99	1,440.59	12,007.10	13,447.69	945,892.70
12,545.06	18,493.34	324.42	9,774.37	10,098.79	967,269.06
3,656.02	7,318.31	219.50	75,342.36	75,561.86	448,332.98
1,362.07	3,017.79	....	1,664.17	1,664.17	69,805.06
11,077.89	26,334.12	807.91	11,500.65	12,308.56	1,893,304.28
3,887.28	12,346.49	1,604.04	16,285.30	17,889.34	2,448,223.80
27,321.93	41,282.93	1,181.00	10,460.00	11,641.00	2,062,077.67
4,000.00	5,892.56	....	....	....	167,944.19
879,189.33	1,207,888.16	13,106.46	316,226.03	329,332.49	32,478,799.67
80,772.50	117,181.35	1,812.74	38,912.19	40,724.93	1,929,364.17
....	....	....	....	....	....
4,438	10,051	328	4,787	5,115	474,337
768	1,699	50	938	988	74,003
100	203	1	171	172	12,912
5,306	11,953	379	5,896	6,275	561,252

STATEMENT "C"

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps		Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
					$ c.	$ c.	$ c.
Acton	1,957	128	80 c.p.	*s*	9.00	1,876.83	0.96
		5	80 c.p.	*s*	12.00		
		8	60 watt	*m*	4.00		
		60	100 watt	*m*	9.00		
		1	150 watt	*m*	12.00		
		4	300 watt	*m*	20.00		
Agincourt	....	62	100 watt	*m*	12.00	736.00	**
Ailsa Craig	452	62	100 watt	*m*	10.00	638.00	1.41
		1	200 watt	*m*	18.00		
Alexandria	1,931	137	100 watt	*m*	16.00	2,360.00	1.22
Alliston	1,412	104	100 c.p.	*s*	17.50	2,031.50	1.43
		12	100 watt	*m*	17.50		
Alvinston	607	84	100 watt	*m*	20.00	1,854.00	3.05
		6	200 watt	*m*	29.00		
Amherstburg	2,670	82	100 c.p.	*s*	15.00	2,379.96	††
		9	250 c.p.	*s*	30.00		
		26	200 watt	*m*	20.00		
		12	300 watt	*m*	30.00		
Ancaster Twp.	....	32	100 watt	*m*	11.50	1,054.00	**
		49	150 watt	*m*	14.00		
Apple Hill	....	33	100 watt	*m*	16.00	528.00	**
Arkona	408	50	100 watt	*m*	20.00	1,000.00	2.45
Arthur	1,052	92	100 watt	*m*	18.00	1,651.50	1.57
Athens	626	40	100 watt	*m*	12.00	1,055.00	1.68
		23	200 watt	*m*	25.00		
Aylmer	1,992	182	100 watt	*m*	10.00	2,427.49	1.22
		24	300 watt	*m*	25.00		
		1	Traffic light	*m*	40.00		
Ayr	763	92	100 watt	*m*	10.00	1,028.00	1.34
		3	500 watt	*m*	36.00		
Baden	....	69	100 watt	*m*	9.00	621.00	**

NOTE: The "Cost to municipality in 1936" represents the charges billed to the municipality by the utility for street lighting service in the calendar year. This total charge differs in some cases from the total computed for the installation at the rates shown, for the following reasons:—FIRST: Certain equipment may have been in service for less than twelve months. SECOND: More equipment than shown for December 31 may have been in service earlier in the year.

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

††Certain additional street lighting costs for special service are paid direct in form of debenture charges.

STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Barrie	7,856	473	50 c.p. *s*	9.00	6,138.39	0.78
		15	100 watt *m*	17.00		
		50	200 watt *m*	22.00		
		8	200 watt *m*	18.00		
		3	200 watt (6 mos.) *m*	15.00		
		13	300 watt (9 mos.) *m*	25.00		
		1	500 watt *m*	30.00		
Bath	360	21	100 watt *m*	34.00	714.00	1.98
Beachville	....	47	100 watt *m*	11.00	517.00	**
Beaverton	920	105	100 watt *m*	10.00	1,305.50	1.42
		11	100 watt (6 mos.) *m*	7.00		
		6	500 watt *m*	30.00		
Beeton	585	65	150 c.p. *s*	16.00	1,264.00	2.16
		14	100 watt *m*	16.00		
Belle River	705	78	100 watt *m*	12.00	936.00	1.33
Belleville	14,411	559	100 c.p. *s*	8.00	10,170.25	0.71
		11	250 c.p. *s*	20.00		
		52	1,000 c.p. *s*	40.00		
		147	300 watt *m*	25.00		
Blenheim	1,740	164	150 c.p. *s*	12.00	2,512.00	††
		3	400 c.p. *s*	28.00		
		12	600 c.p. *s*	37.00		
		1	Traffic light	16.00		
Bloomfield	669	60	100 c.p. *s*	12.00	720.22	1.08
Blyth	632	100	100 watt *m*	13.00	1,300.00	2.06
Bolton	559	45	100 watt *m*	12.00	1,078.24	1.93
		23	200 watt *m*	21.50		
Bothwell	697	66	100 watt *m*	11.00	1,293.00	1.86
		21	300 watt *m*	27.00		
Bowmanville	3,631	177	100 c.p. *s*	10.00	3,158.81	0.87
		4	150 watt *m*	20.00		
		42	300 watt *m*	30.00		
Bradford	999	60	150 c.p. *s*	16.00	1,072.00	1.07
		7	150 watt *m*	16.00		
Brampton	5,447	671	100 watt *m*	8.00	5,514.50	1.01
		2	500 watt *m*	35.00		
Brantford	31,212	149	1,500 c.p. *s*	45.00	32,904.95	††
		3,409	100 watt *m*	7.50		
		8	250 watt *m*	10.00		
		2	300 watt *m*	16.00		
		18	750 watt *m*	37.00		
		4	750 watt *m*	46.00		

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

††Certain additional street lighting costs for special service are paid direct in form of debenture charges.

STATEMENT "C"—Concluded

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Brantford Twp.		372	100 watt *m*	11.00	4,092.00	**
Brechin	‡	33	100 watt *m*	14.00	462.00	**
Bridgeport		12	100 watt *m*	7.00	654.00	**
		57	100 watt *m*	10.00		
Brigden		45	60 watt *m*	11.00	789.00	**
		21	100 watt *m*	14.00		
Brighton	1,374	137	100 c.p. *s*	16.00	2,191.92	1.60
Brockville	9,874	613	100 c.p. *s*	10.00	8,453.50	0.86
		9	1-lt. stand's *m*	19.00		
		35	3-lt. stand's *m*	21.00		
		51	5-lt. stand's *m*	24.00		
		13	300 watt *m*	20.00		
Brussels	775	81	100 watt *m*	12.00	1,296.00	1.67
		18	200 watt *m*	18.00		
Burford		67	100 watt *m*	10.00	670.08	**
Burgessville		24	100 watt *m*	13.00	312.00	**
Caledonia	1,351	147	100 watt *m*	9.00	1,749.46	1.29
		20	100 watt (bridge) *m*	9.50		
		9	100 watt (twp.) *m*	13.00		
		6	200 watt *m*	14.00		
		2	300 watt *m*	21.00		
Campbellville		20	100 watt *m*	24.00	480.00	**
Cannington	757	62	100 watt *m*	15.00	1,110.49	1.47
		1	200 watt *m*	18.50		
		3	300 watt *m*	22.00		
		3	500 watt *m*	32.00		
Capreol	1,750	96	100 watt *m*	20.00	1,920.00	1.10
Cardinal	1,148	48	100 watt *m*	15.00	937.00	0.82
		12	200 watt *m*	21.00		
Carleton Place	4,250	81	60 watt *m*	13.00	4,800.75	1.13
		102	200 watt *m*	20.00		
		68	300 watt *m*	25.00		
Cayuga	700	80	100 watt *m*	18.00	1,441.50	2.06
Chatham	15,957	35	150 c.p. *s*	12.00	19,241.60	††
		716	150 c.p. *s*	13.00		
		32	250 c.p. *s*	16.00		
		75	600 c.p. *s*	30.00		
		37	600 c.p. *s*	31.00		
		137	1,000 c.p. *s*	38.00		
		2	250 watt *m*	24.00		
			Park floodlights	350.60		

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‡Includes Mara and Thorah townships.

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Chatsworth	302	41	100 watt *m*	15.00	615.00	2.04
Chesley	1,759	118	150 c.p. *s*	13.00	1,538.33	0.87
Chesterville	1,074	86	100 watt *m*	12.00	1,032.00	0.96
Chippawa	1,195	98	100 watt *m*	13.00	1,295.65	1.08
Clifford	423	57 8	100 watt *m* 200 watt *m*	13.00 20.00	846.48	2.00
Clinton	1,873	150 29 1	150 c.p. *s* 100 watt *m* 150 watt *m*	11.00 11.00 55.00	2,014.86	1.08
Cobden	641	38 12	100 watt *m* 150 watt *m*	20.00 30.00	1,120.00	1.75
Cobourg	5,837	392 4 19	100 c.p. *s* 250 c.p. *s* 500 watt *m*	12.00 23.00 47.50	5,653.04	0.97
Colborne	986	118 3	60 c.p. *s* 100 watt *m*	12.00 12.00	1,405.88	1.43
Coldwater	617	44 8	100 watt *m* 200 watt *m*	11.00 17.00	608.00	0.99
Collingwood	5,749	420	150 c.p. *s*	9.00	3,577.25	0.62
Comber	....	55	100 watt *m*	12.00	660.00	**
Cookstown	....	56	150 c.p. *s*	15.00	840.00	**
Cottam	....	32	100 watt *m*	15.00	480.00	**
Courtright	283	43	100 watt *m*	18.00	774.00	2.73
Creemore	649	60	100 watt *m*	12.00	711.00	1.10
Dashwood	....	41	100 watt *m*	11.00	451.00	**
Delaware	....	22	100 watt *m*	12.00	264.00	**
Deseronto	1,363	132	100 c.p. *s*	10.00	1,445.33	1.06
Dorchester	....	67	100 watt *m*	10.00	670.00	**
Drayton	568	80	100 watt *m*	11.00	843.33	1.48
Dresden	1,509	128 12 15	100 c.p. *s* 100 watt *m* 50 watt *m*	13.00 12.00 5.70	1,864.32	1.24
Drumbo	....	39 1	100 watt *m* 250 watt (6 mos.) *m*	13.00 31.00	522.50	**
Dublin	....	50	100 watt *m*	14.00	700.00	**

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps		Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
					$ c.	$ c.	$ c.
Dundalk	646	82	100 watt	*m*	15.00	1,230.00	1.90
Dundas	5,062	286	100 watt	*m*	12.00	5,508.00	††
		12	200 watt	*m*	16.00		
		54	200 watt	*m*	32.00		
		6	200 watt (orn.)	*m*	26.00		
Dunnville	3,938	247	150 c.p.	*s*	10.50	3,673.56	0.93
		27	1,000 c.p.	*s*	40.00		
Durham	1,823	105	150 c.p.	*s*	17.00	1,940.68	1.06
		6	400 c.p.	*s*	25.00		
Dutton	810	114	100 watt	*m*	9.00	1,021.44	1.26
East York Twp.	....	1	60 watt	*m*	7.80	19,564.98	**
		967	100 watt	*m*	13.00		
		4	200 watt	*m*	19.50		
		2	250 watt	*m*	22.75		
		256	300 watt	*m*	26.00		
		15	500 watt	*m*	29.00		
Elmira	2,352	190	100 watt	*m*	9.00	1,834.00	0.78
		8	200 watt	*m*	12.00		
		1	500 watt	*m*	28.00		
Elmvale	....	58	100 watt	*m*	12.00	685.00	**
Elmwood	....	23	150 watt	*m*	23.00	529.00	**
Elora	1,143	82	100 watt	*m*	14.00	1,687.92	1.48
		27	200 watt	*m*	20.00		
Embro	434	56	100 watt	*m*	12.00	672.50	1.55
Erieau	286	21	100 watt	*m*	18.00	378.00	1.32
Essex	1,748	133	60 watt	*m*	7.50	2,454.18	††
		15	100 watt	*m*	10.00		
		47	300 watt	*m*	18.00		
		1	500 watt	*m*	28.00		
		21	Empty sockets		1.50–7.50		
Etobicoke Twp.	....	975	100 watt	*m*	13.50	13,492.44	**
		22	100 watt	*m*	18.00		
		2	250 watt	*m*	16.00		
Exeter	1,658	168	100 watt	*m*	9.50	2,677.50	1.61
		32	300 watt	*m*	33.00		
		3	100 watt (Park)	*m*	8.50		
Fergus	2,623	152	100 watt	*m*	14.00	2,796.21	1.07
		41	150 watt	*m*	16.50		
Finch	368	38	100 watt	*m*	13.00	494.00	1.34
Flesherton	469	53	100 watt	*m*	11.00	608.00	1.30
		1	300 watt	*m*	25.00		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Fonthill	800	71	100 watt *m*	15.00	1,065.00	1.33
Forest	1,475	131	60 watt *m*	7.00	2,321.00	1.57
		123	100 watt *m*	11.00		
		3	100 watt *m* (Station platform)	17.00		
Fort William	24,371	390	100 c.p. *s*	8.00	17,960.57	0.74
		79	600 c.p. *s*	28.00		
		247	1,000 c.p. *s*	38.00		
		170	100 watt *m*	8.00		
		16	250 watt *m*	18.00		
		64	300 watt *m*	23.00		
Galt	13,958	975	80 c.p. *s*	9.00	14,660.43	1.05
		289	100 watt *m*	6.50		
		100	100 watt *m*	8.00		
		27	100 watt *m*	16.00		
		18	150 watt *m*	8.50		
		60	150 watt *m*	9.00		
		40	150 watt *m*	18.00		
		31	150 watt *m*	21.00		
		80	300 watt *m*	17.00		
		12	300 watt *m*	26.00		
		4	300 watt *m*	26.50		
Georgetown‡	2,283	153	100 watt *m*	11.00	2,349.74	....
		21	300 watt *m*	30.00		
		1	300 watt *m*	19.00		
		17	100 watt *m*	13.00		
Glencoe	903	113	100 watt *m*	14.00	1,956.18	2.17
		19	200 watt *m*	20.00		
Goderich	4,344	324	100 c.p. *s*	9.00	3,814.00	0.88
		4	100 c.p. (6 mos.) *s*	9.00		
		8	100 watt *m*	15.00		
		8	200 watt *m*	25.00		
		16	3-lt. stand's. *m*	35.00		
Grand Valley	572	52	100 watt *m*	17.00	884.00	1.55
Granton	....	37	100 watt *m*	10.00	370.00	**
Gravenhurst	1,997	134	100 c.p. *s*	10.00	2,093.00	1.05
		22	50 watt *m*	7.50		
		2	100 watt *m*	10.00		
		16	300 watt *m*	30.00		
Guelph	21,173	12	50 watt *m*	4.00	18,664.54	0.88
		6	60 watt *m*	4.00		
		1,373	100 watt *m*	10.00		
		172	200 watt *m*	12.50		
		35	300 watt *m*	18.75		
		9	500 watt *m*	25.00		
		53	500 watt (220v) *m*	34.00		
		1	Airport beacon *m*	60.00		

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‡Includes Glen Williams.

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Hagersville	1,374	115	100 watt *m*	14.00	2,038.33	1.48
		20	300 watt *m*	22.00		
Hamilton	154,020	6	40 watt *m*	4.50	123,850.05	0.80
		96	50 watt *m*	6.00		
		8,299	100 watt *m*	7.50		
		1,167	200 watt *m*	11.00		
		8	300 watt *m*	18.00		
		28	300 watt *m*	26.00		
		77	300 watt *m*	32.00		
		27	300 watt *m*	34.00		
		480	500 watt *m*	32.00		
		601	500 watt *m*	37.00		
		65	750 watt *m*	55.00		
		3	Danger signals *m*	28.00		
		2	1,200 watt stds. *m*	70.00		
Hanover	3,056	93	150 c.p. *s*	22.00	2,917.08	0.95
		16	300 c.p. *s*	27.00		
		4	100 watt *m*	22.00		
		13	200 watt *m*	27.00		
Harriston	1,325	89	150 c.p. *s*	12.00	1,539.00	1.16
		3	100 watt *m*	12.00		
		29	200 watt *m*	15.00		
Harrow	933	1	100 watt *m*	12.00	1,308.66	1.40
		79	200 watt *m*	16.50		
Hastings	817	60	100 watt *m*	16.00	1,164.01	1.42
		7	200 watt *m*	20.00		
Havelock	1,161	63	100 c.p. *s*	16.00	1,533.00	1.32
		21	250 c.p. *s*	25.00		
Hensall	702	83	100 watt *m*	12.00	996.00	1.42
Hespeler	2,877	91	150 c.p. *s*	12.00	3,107.00	1.08
		34	250 c.p. *s*	16.00		
		15	400 c.p. stand's. *s*	30.00		
		51	150 watt *m*	11.00		
		10	300 watt *m*	21.50		
		7	300 watt stand's. *m*	35.00		
Highgate	334	40	100 watt *m*	11.00	567.00	1.70
		6	200 watt *m*	17.00		
		1	300 watt *m*	25.00		
Holstein	....	14	100 watt *m*	25.00	350.00	**
Humberstone	2,532	105	100 watt *m*	12.00	1,449.50	.057
		16	200 watt *m*	17.00		
Huntsville	2,718	47	100 c.p. *s*	12.00	2,473.05	0.91
		26	150 c.p. *s*	16.00		
		28	250 c.p. *s*	20.00		
		68	75 watt *m*	10.00		
		97	75 watt (orn. stand's) *m*	42.00 per 1,000 watts		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Ingersoll	5,158	13	100 c.p. (park 6 mos.) *s*	5.50	4,583.14	††
		319	100 c.p. *s*	10.00		
		2	600 c.p. *s*	28.00		
		2	1,000 c.p. (church) *s*	25.00		
		26	1,000 c.p. *s*	35.00		
		11	300 watt *m*	30.00		
Jarvis	495	70	100 watt *m*	11.00	770.00	1.55
Kemptville	1,330	94	100 watt *m*	18.00	1,712.00	1.29
		1	250 watt *m*	25.00		
Kincardine	2,468	151	150 c.p. *s*	20.00	4,322.50	1.75
		6	150 c.p. (6 mos.) *s*	20.00		
		20	100 watt *m*	15.00		
		36	200 watt *m*	25.00		
		1	1,000 watt (6 mos.) *m*	85.00		
Kingston	24,173	99	100 c.p. *s*	12.00	22,297.00	0.92
		267	600 c.p. *s*	35.00		
		259	600 c.p. *s*	46.00		
Kingsville	2,125	112	150 c.p. *s*	10.50	2,832.00	††
		25	250 c.p. *s*	15.00		
		122	100 watt *m*	10.50		
Kirkfield	....	24	100 watt *m*	20.00	480.00	**
Kitchener	31,933	47	16 c.p. *s*	7.00	32,589.82	††
		2,053	80 c.p. *s*	9.00		
		132	250 c.p. *s*	13.00		
		18	1,000 c.p. *s*	25.00		
		202	100 watt *m*	9.00		
		448	200 watt *m*	15.00		
		50	300 watt *m*	17.50		
		109	500 watt *m*	25.00		
Lakefield	1,374	110	100 watt *m*	17.00	1,873.06	1.36
Lambeth	....	9	100 watt *m*	11.00	607.82	**
		20	300 watt *m*	31.00		
Lanark	673	38	100 watt *m*	15.00	570.00	0.85
Lancaster	602	41	100 watt *m*	22.00	902.00	1.50
La Salle‡	687	66	Empty sockets *m*	7.50	495.00	....
Leamington	5,020	176	250 c.p. *s*	15.00	5,473.48	††
		4	400 c.p. *s*	19.00		
		193	100 watt *m*	14.00		
Lindsay	6,949	417	100 c.p. *s*	11.50	6,404.96	0.92
		27	1,000 c.p. *s*	60.00		

‡Lights not in use.

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Listowel	2,798	162	60 watt *m*	9.00	3,840.60	††
		118	100 watt *m*	11.00		
		8	200 watt *m*	25.00		
		26	300 watt *m*	30.00		
		3	500 watt *m*	35.00		
London	75,484	94	100 c.p. *s*	10.00	55,101.23	††
		8	150 c.p. *s*	10.00		
		1,941	150 c.p. *s*	11.00		
		114	400 c.p. *s*	18.00		
		304	400 c.p. *s*	24.00		
		32	600 c.p. *s*	28.00		
		277	600 c.p. *s*	30.00		
		2	50 watt *m*	5.00		
		68	100 watt *m*	10.00		
		30	100 watt *m*	14.00		
		4	150 watt *m*	12.00		
		12	200 watt *m*	9.34		
		63	200 watt *m*	14.00		
		514	300 watt *m*	18.00		
		42	300 watt *m*	20.00		
		11	500 watt *m*	25.00		
		46	500 watt *m*	40.00		
London Twp.	....	70	100 watt *m*	12.00	870.50	**
		1	200 watt *m*	16.50		
Long Branch	3,746	302	100 watt *m*	13.00	3,823.04	1.02
Lucan	643	71	100 watt *m*	14.00	994.02	1.55
Lucknow	1,062	75	100 watt *m*	21.00	1,575.00	1.48
Lynden	....	44	100 watt *m*	10.00	440.00	**
Madoc	1,253	390	25 watt *m*	3.00	1,500.00	1.20
		60	100 watt *m*	5.00		
		1	300 watt *m*	11.00		
Markdale	791	90	150 c.p. *s*	10.00	900.00	1.14
Markham	1,114	112	100 watt *m*	12.00	1,344.00	1.21
Marmora	986	44	75 watt *m*	14.00	1,361.00	1.38
		24	100 watt *m*	16.00		
		19	150 watt *m*	19.00		
Martintown	....	15	100 watt *m*	18.00	270.00	**
Maxville	699	65	150 c.p. *s*	18.00	1,170.00	1.67
Meaford	2,762	182	150 c.p. *s*	11.00	2,966.13	1.07
		28	100 watt *m*	11.00		
		35	200 watt *m*	19.00		
Merlin	....	43	100 watt *m*	15.00	645.00	**

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Merritton	2,530	305	100 watt *m*	9.00	3,370.00	1.33
		25	300 watt *m*	25.00		
Midland	6,845	328	150 c.p. *s*	11.00	6,376.00	0.93
		52	100 watt *m*	11.00		
		30	300 watt *m*	22.00		
		8	300 watt (6 mos.) *m*	24.00		
		36	500 watt *m*	40.00		
Mildmay	755	46	100 watt *m*	12.00	761.00	1.01
		11	150 watt *m*	19.00		
Milton	1,739	206	100 watt *m*	9.50	2,038.91	1.17
		3	300 watt *m*	30.00		
Milverton	992	95	100 watt *m*	9.00	999.00	1.01
		12	200 watt *m*	12.00		
Mimico	6,915	335	100 watt *m*	12.00	7,047.00	1.02
		92	200 watt *m*	20.00		
		47	300 watt *m*	26.00		
Mitchell	1,567	232	150 c.p. *s*	9.00	2,088.00	1.32
Moorefield	....	25	100 watt *m*	14.00	350.00	**
Mount Brydges	....	53	100 watt *m*	10.00	547.00	**
		1	200 watt *m*	17.00		
Mount Forest	1,743	120	150 c.p. *s*	11.00	2,251.00	1.29
		39	250 c.p. *s*	14.00		
		35	100 watt *m*	11.00		
Napanee	3,013	152	100 watt *m*	12.00	4,191.00	1.39
		2	250 watt *m*	28.00		
		2	250 watt *m*	30.00		
		40	300 watt *m*	34.00		
		5	300 watt stand's. *m*	27.00		
		21	400 watt *m* (clusters)	36.00		
Neustadt	484	39	150 c.p. *s*	25.00	975.00	2.01
Newbury	282	47	100 watt *m*	15.00	705.00	2.50
New Hamburg	1,456	165	100 watt *m*	9.00	2,217.00	1.52
		61	200 watt *m*	12.00		
New Toronto	8,040	122	75 watt *m*	13.00	8,427.62	1.05
		20	150 watt *m*	15.50		
		15	200 watt *m*	17.00		
		83	300 watt *m*	21.00		
		14	300 watt *m*	22.00		
		126	300 watt *m*	24.00		
		3	500 watt *m*	29.00		
		2	1,000 watt *m*	52.00		

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Niagara Falls	18,527	828	100 c.p. *s*	11.00	27,175.34	1.46
		3	250 c.p. *s*	13.00		
		61	600 c.p. *s*	18.00		
		235	600 c.p. (orn.) *s*	37.00		
		196	1,000 c.p. (orn.) *s*	42.00		
		4	100 watt *m*	11.00		
Niagara-on-the-Lake	1,815	222	100 watt *m*	11.00	2,856.96	1.57
		25	200 watt *m*	18.00		
		4	300 watt *m*	20.00		
Nipigon	....	29	100 watt *m*	12.00	432.00	**
		9	200 watt *m*	12.00		
North York Twp.	....	81	100 watt *m*	12.00	3,817.73	**
		20	100 watt *m*	13.00		
		32	100 watt *m*	13.50		
		12	100 watt *m*	15.00		
		10	100 watt *m*	16.50		
		1	100 watt *m*	17.70		
		1	100 watt *m*	18.00		
		65	200 watt *m*	23.00		
		1	400 watt (floodlight) *m*	31.00		
		1	400 watt (mercury) *m*	43.00		
		2	1,000 watt (floodlights) *m*	65.00		
		1	Police sign *m*	12.00		
		1	Traffic light *m*	8.00		
		1	Traffic light *m*	30.00		
Norwich	1,163	114	100 watt *m*	10.00	2,120.00	1.82
		28	400 watt *m*	28.00		
Norwood	753	80	100 c.p. *s*	18.00	1,587.00	2.11
		6	100 c.p. *s*	20.00		
		1	100 c.p. *s*	27.00		
Oil Springs	472	41	100 watt *m*	18.00	768.00	1.63
		1	300 watt (6 mos.) *m*	30.00		
Omemee	588	48	100 c.p. *s*	14.00	995.59	1.69
		4	100 watt *m*	12.50		
		10	250 watt *m*	28.00		
Orangeville	2,792	97	150 c.p. *s*	12.00	3,014.04	1.08
		50	250 c.p. *s*	18.00		
		38	300 watt *m*	25.00		
Oshawa	24,097	848	100 c.p. *s*	11.00	11,868.57	0.49
		1	1,000 c.p. *s*	27.00		
		48	100 watt *m*	12.00		
		109	150 watt *m*	13.00		
		30	200 watt *m*	18.00		

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Ottawa	140,316	740	100 c.p. (driveway) *s*	6.00	76,546.33	0.55
		380	100 c.p. *s*	7.00		
		820	400 c.p. *s*	25.00		
		857	600 c.p. *s*	35.00		
		59	Arcs *s*	45.00		
		2,910	100 watt (white way) *m*	48c. per ft.		
		39	100 watt (residential) *m*	5½c. per ft.		
Otterville	....	59	100 watt *m*	11.00	813.50	**
		12	200 watt *m*	16.00		
Owen Sound	13,139	435	150 c.p. *s*	13.00	12,963.10	0.99
		335	400 c.p. *s*	16.00		
		12	600 c.p. *s*	23.00		
		43	1,000 c.p. *s*	37.00		
Paisley	752	90	100 watt *m*	14.00	1,260.00	1.68
Palmerston	1,410	64	80 c.p. *s*	9.00	2,136.38	1.52
		1	400 c.p. *s*	25.00		
		11	60 watt *m*	9.00		
		25	100 watt *m*	10.00		
		8	150 watt *m*	10.00		
		3	250 watt *m*	25.00		
		19	300 watt *m*	25.00		
		32	300 watt stand's. *m*	30.00		
		1	500 watt *m*	35.00		
Paris	4,324	470	100 c.p. *s*	8.50	5,510.00	1.27
		10	400 c.p. *s*	28.00		
		25	500 c.p. *s*	35.00		
		2	60 watt *m*	7.00		
		2	100 watt *m*	9.00		
		8	500 watt *m*	35.00		
Parkhill	979	88	100 watt *s*	14.00	1,537.94	1.57
		15	200 watt *m*	23.00		
Penetanguishene	3,989	192	150 c.p. *s*	11.00	2,239.00	0.56
		5	200 watt *m*	15.00		
		4	300 watt *m*	20.00		
Perth	4,215	76	100 c.p. *s*	17.00	2,387.60	0.57
		12	250 c.p. *s*	27.00		
		7	400 c.p. *s*	30.00		
		13	600 c.p. *s*	45.00		
Peterborough	22,973	156	60 watt *m*	12.00	21,984.79	0.96
		364	100 watt *m*	13.00		
		586	300 watt *m*	20.00		
		85	300 watt *m*	45.00		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Petrolia	2,705	147	150 c.p. *s*	12.00	2,674.00	0.99
		24	600 c.p. *s*	38.00		
Picton	3,560	231	100 c.p. *s*	9.00	3,101.35	0.87
		85	250 c.p. *s*	15.00		
Plattsville		34	100 watt *m*	12.00	408.00	**
Point Edward	1,290	100	150 c.p. *s*	13.00	1,602.62	1.24
		15	250 c.p. *s*	20.00		
Port Arthur	20,352	2,709	100 watt *m*	5.00	18,984.96	0.93
		232	300 watt *m*	10.00		
		208	500 watt *m*	15.00		
Port Colborne	5,844	15	400 c.p. *s*	23.00	7,853.12	††
		78	600 c.p. *s*	25.00		
		272	100 watt *m*	12.00		
		34	100 watt *m*	14.00		
		131	200 watt *m*	18.00		
Port Credit	1,750	275	100 watt *m*	10.00	2,750.00	1.57
Port Dalhousie	1,408	129	100 watt *m*	12.50	1,636.25	1.16
		2	200 watt *m*	15.00		
Port Dover	1,606	201	100 watt *m*	10.00	2,675.54	1.67
		30	100 watt (Summer) *m*	6.00		
		15	300 watt *m*	18.00		
		4	300 watt (Summer) *m*	10.00		
		262	25 watt (decorative) *m*	0.67		
Port Elgin	1,270	106	100 watt (6 mos.) *m*	14.00	2,317.34	1.82
		160	100 watt (4 mos.) *m*	14.00		
		110	100 watt (2 mos.) *m*	14.00		
		26	200 watt *m*	22.00		
Port Hope	4,320	392	100 c.p. *s*	11.00	4,312.16	0.99
Port McNicoll	935	54	100 watt *m*	12.00	1,048.00	1.12
		20	200 watt *m*	20.00		
Port Perry	1,125	98	100 watt *m*	15.00	1,470.00	1.31
Port Rowan	666	53	100 watt *m*	18.00	1,131.00	1.70
		2	100 watt (6 mos.) *m*	18.00		
Port Stanley	769	213	100 watt *m*	11.00	2,335.66	3.04
Prescott	2,942	169	100 watt *m*	10.00	3,475.00	1.18
		105	200 watt *m*	17.00		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Preston	6,287	135	150 c.p. *s*	10.00	5,032.00	0.80
		214	100 watt *m*	10.00		
		9	250 watt *m*	18.00		
		40	500 watt *m*	30.00		
		6	5-lt. standards *m*	30.00		
Priceville		14	100 watt *m*	40.00	560.00	**
Princeton		38	100 watt *m*	12.00	456.00	**
Queenston		19	100 watt *m*	16.00	304.02	**
Richmond	420	26	100 watt *m*	16.00	416.04	0.99
Richmond Hill	1,234	99	75 watt *m*	11.00	1,435.92	1.16
		17	100 watt *m*	12.00		
		6	200 watt *m*	16.00		
Ridgetown	1,985	189	150 c.p. *s*	9.00	3,169.00	††
		1	1,000 c.p. *s*	40.00		
		78	100 watt *m*	9.00		
		2	200 watt *m*	18.00		
		2	250 watt *m*	20.00		
		19	500 watt *m*	36.00		
Ripley	454	43	100 watt *m*	20.00	1,070.00	2.36
		6	200 watt *m*	35.00		
Riverside	4,820	132	75 watt *m*	12.00	2,900.04	††
		38	150 watt *m*	16.00		
			Empty sockets *m*	708.00		
Rockwood		86	100 watt *m*	9.00	774.00	**
Rodney	713	69	100 watt *m*	10.00	1,042.33	1.46
		22	200 watt *m*	18.00		
Rosseau	305	35	100 watt *m*	35.40	1,239.00	4.06
Russell		47	100 watt *m*	16.00	752.00	**
St. Catharines	26,571	2,142	100 watt *m*	8.00	25,005.15	††
		19	100 watt *m*	10.00		
		148	200 watt *m*	11.00		
		71	200 watt *m*	18.00		
		46	300 watt *m*	26.00		
		10	500 watt *m*	20.00		
		60	500 watt *m*	34.00		
		5	1,000 watt *m*	40.00		
		10	500 watt bridge *m*	24.75 per h.p.		
		7	300 watt lights			
St. George		39	100 watt *m*	9.50	370.50	**
St. Jacobs		46	100 watt *m*	10.00	460.00	**
St. Marys	4,032	230	100 c.p. *s*	10.00	4,713.50	1.17
		106	250 c.p. *s*	14.00		
		19	150 watt *m*	12.00		
		32	300 watt *m*	22.00		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
St. Thomas	16,156	1,081	100 c.p. *s*	9.00	14,624.25	††
		27	250 c.p. *s*	13.00		
		1	600 c.p. *s*	32.00		
		114	600 c.p. *s*	34.00		
		1	60 watt *m*	3.00		
		6	60 watt *m*	4.50		
		27	100 watt *m*	5.00		
		22	300 watt *m*	22.00		
Sarnia	18,064	1,027	150 c.p. *s*	12.00	18,714.48	††
		56	250 c.p. *s*	16.50		
		66	400 c.p. *s*	22.00		
		79	600 c.p. *s*	35.00		
		13	600 c.p. *s*	45.00		
		3	100 watt *m*	12.00		
		8	150 watt *m*	16.50		
		14	300 watt *m*	32.00		
Scarboro Twp.	....	216	100 c.p. *s*	12.00	14,537.39	**
		10	100 c.p. (empty) *s*	9.00		
		2	250 c.p. *s*	17.00		
		19	40 watt *m*	12.00		
		2	60 watt *m*	18.00		
		423	100 watt *m*	12.00		
		24	100 watt (empty) *m*	9.00		
		7	200 watt *m*	17.00		
		10	200 watt *m*	21.00		
		179	300 watt *m*	24.00		
		128	300 watt (empty) *m*	14.50		
Seaforth	1,717	119	100 c.p. *s*	10.50	1,749.50	1.02
		20	300 watt *m*	25.00		
Shelburne	1,102	96	150 c.p. *s*	11.00	1,056.00	0.96
Simcoe	5,503	273	100 c.p. *s*	11.00	4,575.50	††
		27	1,000 c.p. *s*	40.00		
		8	150 watt *m*	11.00		
		8	200 watt *m*	15.00		
		6	200 watt (orn.) *m*	24.00		
		1	500 watt *m*	53.00		
		1	1,000 watt *m*	60.00		
Smiths Falls	7,539	18	50 watt *m*	9.50	7,468.04	0.99
		105	100 watt *m*	18.00		
		1	200 watt *m*	25.00		
		171	300 watt *m*	25.00		
		85	Empty sockets *m*	13.00		
Southampton	1,321	116	100 watt *m*	13.00	2,318.88	1.76
		32	250 watt *m*	21.00		
		39	60 watt (3 mos.) *m*	12.00		
		1	Decorative strings *m*	36.00		
Springfield	386	51	100 watt *m*	11.00	561.00	1.45

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps		Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
					$ c.	$ c.	$ c.
Stamford Twp.	....	864	100 watt	*m*	9.00	7,433.92	**
Stayner	1,008	80	100 c.p.	*s*	12.00	1,284.00	1.27
		18	200 watt	*m*	18.00		
Stirling	965	77	100 c.p.	*s*	10.00	1,614.96	1.67
		30	150 watt	*m*	10.00		
		2	300 watt	*m*	24.75		
		15	500 watt	*m*	32.50		
Stouffville	1,149	126	100 watt	*m*	12.00	1,512.00	1.32
Stratford	17,643	871	100 c.p.	*s*	10.00	16,558.79	0.94
		74	600 c.p.	*s*	25.00		
		116	600 c.p.	*s*	30.00		
		6	600 c.p.	*s*	35.00		
		63	1,000 c.p.	*s*	34.00		
		4	100 watt	*m*	10.00		
		4	500 watt	*m*	34.00		
Strathroy	2,886	298	100 c.p.	*s*	9.00	4,050.96	1.40
		21	250 c.p.	*s*	15.00		
		34	300 watt	*m*	31.00		
Streetsville	676	42	100 watt	*m*	9.50	935.50	1.38
		28	200 watt	*m*	11.50		
		13	300 watt	*m*	16.50		
Sudbury	20,079	690	100 c.p.	*s*	12.00	19,752.64	0.98
		27	250 c.p.	*s*	16.00		
		11	600 c.p.	*s*	28.00		
		42	600 c.p.	*s*	50.00		
		7	1,000 c.p.	*s*	35.00		
		43	1,000 c.p.	*s*	57.00		
		49	1,000 c.p.	*s*	65.00		
		45	1,500 c.p.	*s*	65.00		
Sunderland	....	29	100 watt	*m*	20.00	720.00	**
		4	500 watt	*m*	35.00		
Sutton	804	118	100 watt	*m*	13.00	1,984.50	2.47
		20	200 watt	*m*	17.00		
		36	Decorative strings (3 mos.)	*m*	13.00		
Tara	509	51	100 watt	*m*	14.00	1,005.35	1.98
		16	300 watt	*m*	48.00		
Tavistock	1,029	82	100 watt	*m*	10.00	1,287.96	1.25
		39	200 watt	*m*	12.00		
Tecumseh	2,472	17	400 c.p.	*s*	24.00	1,248.00	††
		60	100 watt	*m*	14.00		
Teeswater	837	40	150 c.p.	*s*	16.00	1,332.40	1.59
		20	300 c.p.	*s*	30.00		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Thamesford		47	100 watt *m*	11.00	517.00	**
Thamesville	769	68	100 watt *m*	9.00	1,200.00	1.56
		33	200 watt *m*	14.00		
		7	200 watt *m*	18.00		
Thedford	583	69	100 watt *m*	15.00	1,035.00	1.78
Thorndale		32	100 watt *m*	12.00	384.00	**
Thornton		22	100 watt *m*	40.00	880.00	**
Thorold	4,959	381	75 watt *m*	7.50	3,310.95	0.67
		37	200 watt *m*	12.00		
		2	300 watt *m*	15.00		
Tilbury	1,975	103	100 watt *m*	11.00	1,613.24	0.82
		25	200 watt *m*	19.50		
Tillsonburg	3,513	266	100 c.p. *s*	8.50	4,396.32	1.25
		1	250 c.p. *s*	13.00		
		8	300 watt *m*	32.00		
		44	500 watt *m*	42.00		
		1	Traffic light *m*	18.32		
Toronto	638,271	46,774	100 watt *m*	8.00-10.00	537,530.40	0.84
		3,305	200 watt *m*	15.00-20.00		
		67	250 watt *m*	18.00		
		1,414	300 watt *m*	21.00-26.00		
		173	500 watt *m*	35.00-40.00		
		5	1,000 watt *m*	70.00		
		334	5-lt. stds., 100 w. *m*	47.50		
		98	1-lt. stds., 500 w. *m*	47.50		
		391	1-lt. stds., 300 w. *m*	40.00		
		75	1-lt. stds., 500 w. *m*	52.50		
Toronto Twp		411	100 watt *m*	12.00	4,970.21	**
		1	Traffic light *m*	43.20		
Tottenham	539	49	150 c.p. *s*	25.00	1,225.08	2.27
Trenton	6,541	1	500 c.p. *s*	70.00	7,172.98	1.10
		48	600 c.p. *s*	70.00		
		309	100 watt *m*	12.00		
Tweed	1,276	125	100 c.p. *s*	15.00	1,843.75	1.44
Uxbridge	1,451	128	100 watt *m*	14.00	2,118.88	1.46
		5	100 watt (5 mos.) *m*	10.00		
		1	200 watt *m*	18.00		
		1	200 watt (5 mos.) *m*	14.00		
		2	300 watt *m*	22.00		
Victoria Harbour	1,077	78	100 watt *m*	9.00	702.00	0.65
Walkerton	2,428	118	150 c.p. *s*	14.00	2,586.00	1.07
		39	250 c.p. *s*	24.50		
		1	50 watt *m*	6.00		

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STATEMENT "C"—Continued

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Wallaceburg........	4,589	188	150 c.p. *s*	12.00	4,170.00	0.91
		12	400 c.p. *s*	22.00		
		50	300 watt *m*	33.00		
Wardsville...........	257	36	75-100 watt *m*	20.00	720.00	2.80
Warkworth........	....	37	100 watt *m*	16.00	632.04	**
		2	200 watt *m*	28.00		
Waterdown.........	912	72	100 watt *m*	10.00	856.00	0.94
		8	200 watt *m*	17.00		
Waterford	1,173	157	100 watt *m*	8.00	1,512.00	1.29
		9	200 watt *m*	15.00		
		2	500 watt *m*	25.00		
		5	100 watt (Twp.) *m*	12.00		
Waterloo..........	8,310	355	80 c.p. *s*	8.00	7,595.97	††
		120	100 c.p. *s*	10.00		
		93	150 watt *m*	10.00		
		5	200 watt *m*	12.00		
		18	300 watt *m*	21.00		
		3	500 watt *m*	30.00		
		9	500 watt *m*	35.00		
		10	3-lt. standards *m*	25.00		
		44	5-lt. standards *m*	36.00		
Watford	916	90	100 watt *m*	12.50	1,344.96	1.47
		11	200 watt *m*	20.00		
Waubaushene......	....	46	100 watt *m*	9.00	464.00	**
		10	100 watt (5 mos.) *m*	5.00		
Welland...............	10,402	177	600 c.p. *s*	30.00	10,944.83	††
		14	600 c.p. (City park) *s*	30.00		
		430	100 watt *m*	11.00		
		30	200 watt *m*	18.00		
		6	300 watt *m*	30.00		
		4	500 watt *m*	28.00		
		6	Empty sockets *m*	18.00		
Wellesley...........	....	60	100 watt *m*	11.00	695.00	**
Wellington..........	920	83	100 c.p. *s*	12.00	955.00	1.04
West Lorne.........	752	84	100 watt *m*	10.00	1,014.05	1.35
		10	200 watt *m*	18.00		
Weston...............	5,040	421	100 c.p. *s*	7.50	7,260.51	1.44
		24	100 c.p. *s*	9.50		
		111	600 c.p. *s*	30.00		
		20	300 watt *m*	11.00		
		5	5-lt. standards *m*	21.00		
Westport.............	709	2	50 watt *m*	15.00	1,256.68	1.77
		64	100 watt *m*	20.00		

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

††Certain additional street lighting costs for special service are paid direct in form of debenture charges.

STATEMENT "C"—Concluded

Street Lighting Installation in Hydro Municipalities, December 31, 1936; showing Rate per Lamp, Cost to Municipality in 1936, and Cost per Capita.

Municipality	Population	Number of lamps	Size and style of lamps	Rate per lamp per annum	Cost to municipality in 1936	Cost per capita
				$ c.	$ c.	$ c.
Wheatley	723	60	100 watt *m*	12.00	1,368.00	1.89
		40	150 watt *m*	15.00		
Whitby	3,751	123	80 c.p. *s*	11.00	4,049.56	1.08
		73	100 c.p. *s*	12.00		
		165	100 watt *m*	9.50		
		3	500 watt *m*	15.00		
Wiarton	1,715	100	100 watt *m*	16.00	2,305.32	1.34
		25	200 watt *m*	28.00		
Williamsburg		16	100 watt *m*	15.00	240.00	**
Winchester	1,057	118	100 watt *m*	9.00	1,062.00	1.00
Windermere	153	13	100 watt *m*	35.00	455.00	2.97
Windsor	98,745	2,861	100 c.p. *s*	11.50	100,499.37	††
		289	100 c.p. *s*	12.00		
		311	100 c.p. *s*	13.00		
		1,040	250 c.p. *s*	17.50		
		54	250 c.p. *s*	21.00		
		696	400 c.p. *s*	27.50		
		15	400 c.p. (5 mos.) *s*	27.50		
		13	400 c.p. *s*	28.00		
		56	400 c.p. *s*	36.00		
		2	600 c.p. *s*	36.00		
		804	100 watt *m*	8.00		
		835	100 watt *m*	9.00		
		20	100 watt *m*	13.00		
		110	150 watt *m*	11.00		
		85	150 watt *m*	14.00		
		198	200 watt *m*	13.00		
Wingham	1,987	102	150 c.p. *s*	17.00	3,332.33	1.68
		25	250 c.p. *s*	30.00		
		22	200 watt *m*	30.00		
		8	Decorative strings	30.00		
Woodbridge	811	92	100 watt *m*	10.00	915.82	1.13
Woodstock	10,936	554	100 c.p. *s*	8.00	8,279.40	0.76
		14	250 c.p. *s*	20.00		
		106	100 watt *m*	8.00		
		22	150 watt *m*	12.00		
		1	250 watt *m*	12.00		
		78	300 watt *m*	32.00		
Woodville	390	33	100 watt *m*	12.00	626.04	1.61
		2	200 watt *m*	20.00		
		5	500 watt *m*	38.00		
Wyoming	504	51	100 watt *m*	15.00	765.00	1.52
Zurich		63	100 watt *m*	11.00	693.00	**

**Population not shown in Government statistics. *s* Series system. *m* Multiple system.

††Certain additional street lighting costs for special service are paid direct in form of debenture charges.

STATEMENT "D"

(pages 420 to 437)

Statistics Relating to the Supply of Electrical Energy to Consumers
in Ontario Urban Municipalities Served by
The Hydro-Electric Power Commission
for the year 1936

STATEMENT "E"

(pages 438 to 453)

Cost of Power to Municipalities and Rates to Consumers for
Domestic Service—Commercial Light Service—Power Service
in Ontario Urban Municipalities Served by
The Hydro-Electric Power Commission
for the year 1936

STATEMENT "D"

Statistics Relating to the Supply of Electrical Energy to Consumers in Urban Municipalities Served by The Hydro-Electric Power Commission

Regarding the results of Hydro operation from the standpoint of the consumers, the following tabulation gives much useful and interesting information. For each main class of service in each urban municipal utility receiving power at cost from the Commission, Statement "D" lists the revenue, the consumption and the number of consumers, together with unit average costs and consumptions and other pertinent data.

The policy and practice of the Commission has been, and is, to make as widespread and beneficial a distribution of electrical energy as possible, and to extend to every community that can economically be reached by transmission lines, the benefit of electrical service. Even where, in certain localities, by reason of the distance from a source of supply or on account of the small quantity of power required by the municipality, the cost per horsepower to the municipality—and, consequently, the cost of service to the consumer—must unavoidably be higher than in more favourably situated communities, service has not been withheld when the consumers were able and willing to pay the cost.

The accompanying diagram summarizes graphically certain data of Statement "D" respecting the average cost to the consumer. It will be observed that the total amount of the energy sold in municipalities where circumstances necessitate rates which result in the higher average costs to the consumer is relatively insignificant. With respect to power service, it should be noted that the statistics of Statement "D," and of the diagram, cover mainly retail power service supplied to the smaller industrial consumers. The average amount of power taken by the industrial consumers served by the municipalities is about 40 horsepower. The Commission serves certain large power consumers direct on behalf of the various systems of municipalities.

It should be kept in mind that the revenues reported in Statement "D," and used for purposes of calculating the net unit costs to the consumer, are the total revenues contributed by the consumers, and provide, in addition to the cost of power, sums specifically applicable to the retirement of capital, and also operating surplus which is in part applied to retirement of capital or extension of plant and is in part returned in cash to the consumers.

It should also be noted that average costs per kilowatt-hour or per horsepower if employed indiscriminately as a criterion by means of which to compare the rates or prices for electrical service in various municipalities, will give misleading results. The average costs per kilowatt-hour, as given in Statement "D" for respective classes of service in each municipality, are statistical results obtained by dividing the respective revenues by the aggregate kilowatt-hours sold. As such, the data reflect the combined influence of a number of factors, of which the rates or prices to consumers are but one factor. Owing to the varying influence of factors other than the rates, it is seldom found that in any two municipalities the average cost per kilowatt-hour to the consumers, even of the same classification, is in proportion to the respective rates for service. Instances even occur where for a class of consumers in one municipality, the average costs per kilowatt-hour are substantially lower than for the same class in another municipality, even though the rates are higher.

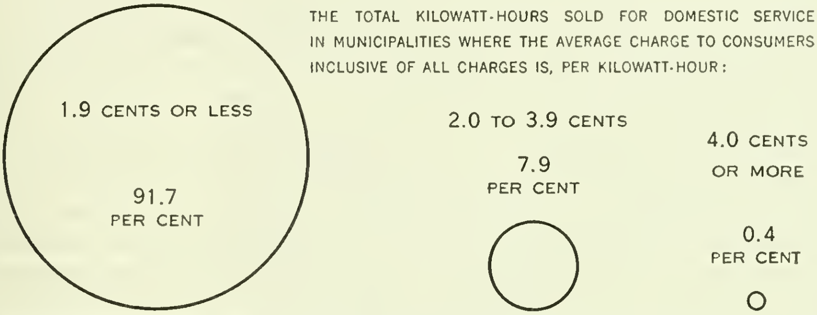
COST OF ELECTRICAL SERVICE

IN MUNICIPALITIES SERVED BY

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

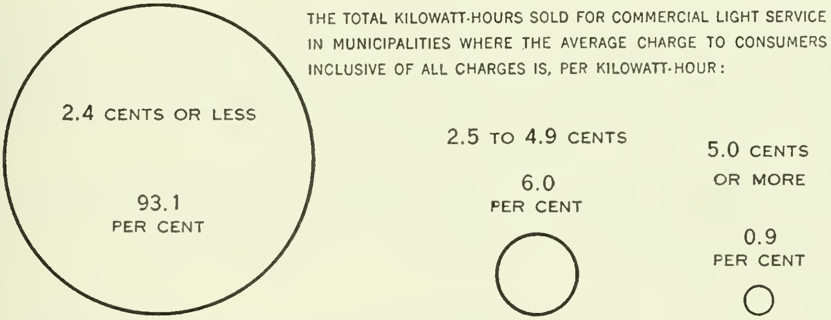
DOMESTIC SERVICE

THE AREAS OF THE CIRCLES REPRESENT PROPORTIONATELY THE TOTAL KILOWATT-HOURS SOLD FOR DOMESTIC SERVICE IN MUNICIPALITIES WHERE THE AVERAGE CHARGE TO CONSUMERS INCLUSIVE OF ALL CHARGES IS, PER KILOWATT-HOUR:



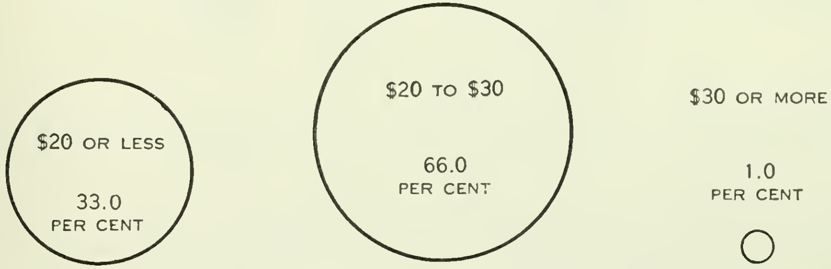
COMMERCIAL LIGHT SERVICE

THE AREAS OF THE CIRCLES REPRESENT PROPORTIONATELY THE TOTAL KILOWATT-HOURS SOLD FOR COMMERCIAL LIGHT SERVICE IN MUNICIPALITIES WHERE THE AVERAGE CHARGE TO CONSUMERS INCLUSIVE OF ALL CHARGES IS, PER KILOWATT-HOUR:



POWER SERVICE SUPPLIED BY MUNICIPALITIES

THE AREAS OF THE CIRCLES REPRESENT PROPORTIONATELY THE AGGREGATE HORSEPOWER SOLD FOR POWER SERVICE IN MUNICIPALITIES WHERE THE AVERAGE CHARGE TO CONSUMERS INCLUSIVE OF ALL CHARGES IS, PER HORSEPOWER PER YEAR:



With respect to domestic service, for example, instances may be observed where two municipalities have identical prices or rates for domestic service, but the average cost per kilowatt-hour to the consumer varies by as much as 100 per cent. Such variations are due principally to differences in the extent of utilization of the service for the operation of electric ranges, water heaters and other appliances, an indication of which is afforded by the statistics of average monthly consumption.

In the case of power service, average unit costs are still less reliable as an indication of the relative rates for service in different municipalities. In the case of hydro-electric power supplied to industries at cost, the rate schedules incorporate charges both for demand and for energy consumption, and thus, although the quantity of power taken by a consumer—that is, the demand as measured in horsepower—is the most important factor affecting costs and revenues, it is not the only one. The number of hours the power is used in the month or year—which, in conjunction with the power, determines the energy consumption, as measured in kilowatt-hours—also affects the costs and revenues. Consequently, in two municipalities charging the same rates for power service, the average cost per horsepower to the consumer will vary in accordance with the consumers' average number of hours' use of the power per month. A greater average energy consumption per horsepower increases the average cost per horsepower and decreases the average cost per kilowatt-hour to the consumer, and *vice versa.**

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*In view of the fact that the data of Statement "D" have been misinterpreted in the making of certain comparisons as to the cost of electricity in various territories, it is desirable to add a word of caution respecting their significance. Essentially, the average cost or revenue per kilowatt-hour is *not a criterion of rates* even with similar forms of rate schedules and for the same class of service. Particularly is this true when revenues and consumptions of all classes of service, and of all kinds of rate schedules, are indiscriminately lumped together in order to deduce a so-called "average cost or rate per kilowatt-hour" for all services.

In one community rates for each class of service, and the cost to every consumer in each class for any given service and consumption, may be substantially higher than in another community, and yet there may be in the former community a lower "average revenue per kilowatt-hour."

Example.—Assume sales of electrical energy by two electric utilities, A and B, in each case 10,000,000 kilowatt-hours.

Class of service	Case A Higher rates and lower revenues per kilowatt-hour			Case B Lower rates and higher revenues per kilowatt-hour		
	Energy sales	Rate per kw-hr.	Revenue	Energy sales	Rate per kw-hr.	Revenue
	kw-hr.	cents	$	kw-hr.	cents	$
Residence	1,000,000	4	40,000	3,000,000	3	90,000
Power	9,000,000	1	90,000	7,000,000	0.75	52,500
Total	10,000,000	....	130,000	10,000,000	....	142,500
Average revenue	1.3 cents per kw-hr.			1.425 cents per kw-hr.		

It will be observed that in Case A *the rates* both for residence and for power service are 33 per cent *higher* than in Case B, but the *average revenue* per kilowatt-hour is nearly 9 per cent less.

In this instance, the explanation lies in the *relative quantities* of energy sold to each class. Service to large power consumers entails a smaller capital investment in distribution lines and equipment and lower operating costs per kilowatt-hour delivered, than does service to domestic and to commercial light consumers, and even where the rates for all classes of service are low, produces a smaller average revenue per kilowatt-hour. Consequently, if one electrical utility as compared with another sells a larger proportion of its energy for power purposes, its "average revenue per kilowatt-hour" may easily be lower than that of the other utility even though its rates for every class of service are substantially higher.

Although the derived statistics of Statement "D" are valueless as a means of comparing the *rates* in one municipality with those in another, they nevertheless fulfil a function in affording a general measure of the *economy of service* to consumers in the co-operating Ontario municipalities—an economy that has resulted primarily from the low rates themselves, and secondarily from the extensive use of the service that has been made possible by the low rates.

Actual bills rendered to typical consumers for similar service under closely comparable circumstances constitute the best basis for making comparisons. In researches respecting rates to consumers therefore the actual *rate schedules* of Statement "E" should be employed, and not statistics of average revenues per kilowatt-hour, as these are valueless for rate comparisons—and particularly so when all classifications of service are combined.

In any consideration of the relative economies of electrical service in the various municipalities—whether based on the actual rates for service as set forth in Statement "E," or on the derived statistics resulting from the rates and other factors as presented in Statement ' D"—full account should be taken respectively of the influence upon costs of such factors as the size of the municipality, the distance from the source of power, the features of the power developments from which service is received, the sizes and concentrations of adjacent markets for electricity, and the sizes and characters of the loads supplied under the various classifications by the local electrical utility to the consumers.

In Statement "D" account has been taken of the sizes of municipalities by grouping them according to whether they are (i) cities—over 10,000 population; (ii) towns of 2,000 to 10,000 population; or (iii) small towns (under 2,000 population), villages, and suburban areas in townships (which are comparable in respect of conditions of supply to the smaller towns and villages). The populations are also given, and the situation of any municipality with respect to transmission lines and power supplies may be ascertained by consulting the map at the end of the Report and the diagrams of stations in Section II.

A feature of the electrical service in Ontario municipalities served by The Hydro-Electric Power Commission is the strikingly large average annual consumption per domestic consumer. There are in all more than 200 Ontario municipalities where the average annual consumption per domestic consumer is in excess of 600 kilowatt-hours. Of the 80 cities and towns with populations of 2,000 or more—in which over 85 per cent of the domestic consumers of the undertaking are served—no less than 66 have an average annual consumption per domestic consumer in excess of 1,000 kilowatt-hours; of these, 31 have an average annual consumption per domestic consumer in excess of 1.500 kilowatt-hours, and 12 have an average annual consumption per domestic consumer in excess of 2,000 kilowatt-hours.

The high average consumption for domestic service results essentially from the policy of the undertaking in providing service "at cost"; the rate schedules designed according to this principle automatically encourage liberal use of the service. Under the standard rate schedules employed by Ontario municipalities, follow-up rates of 1 cent and 1.25 cents (less 10 per cent) are in common use, and as a rule even where the higher initial rates per kilowatt-hour obtain, it is only necessary for the domestic consumer to reach a monthly charge of from $2.00 to $3.00 to obtain the benefit of a follow-up rate of 1.8 cents net. The cost of electric cooking is thus within reach of most of the domestic consumers in Ontario. Electric water heating is also encouraged by low flat rates for continuous heaters and by installation of equipment without capital cost to the consumer.

STATEMENT

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group I—CITIES

Municipality	System	Population	Domestic Service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cent
Belleville	E.O.	14,411	78,403.29	6,253,242	3,129	167	2.09	1.2
Brantford	Nia.	31,212	185,955.84	12,457,989	7,531	138	2.06	1.5
Chatham	Nia.	15,957	86,112.09	4,529,012	3,829	99	1.87	1.9
Fort William	T.B.	24,371	199,114.34	25,628,367	5,466	390	3.03	0.8
Galt	Nia.	13,958	93,324.57	5,513,522	3,657	126	2.13	1.7
Guelph	Nia.	21,173	117,459.78	8,336,096	5,155	135	1.90	1.4
Hamilton	Nia.	154,020	942,647.88	62,751,012	37,842	138	2.07	1.5
Kingston	E.O.	24,173	126,445.96	8,737,537	5,900	122	1.79	1.4
Kitchener	Nia.	31,933	202,274.36	14,054,236	7,357	159	2.29	1.4
London	Nia.	75,484	570,951.81	47,883,498	17,686	226	2.69	1.2
Niagara Falls	Nia.	18,527	150,894.64	10,763,849	4,538	198	2.77	1.4
Oshawa	E.O.	24,097	173,863.62	8,210,485	6,136	111	2.36	2.1
Ottawa	E.O.	140,316	482,755.62	54,187,037	13,367	337	3.00	0.9
Owen Sound	G.B.	13,139	61,477.56	3,633,380	3,263	93	1.57	1.7
Peterborough	E.O.	22,973	136,160.84	9,335,431	5,441	143	2.09	1.5
Port Arthur	T.B.	20,352	111,852.83	9,844,908	4,438	185	2.10	1.1
St. Catharines	Nia.	26,571	145,332.10	11,112,010	6,496	142	1.86	1.3
St. Thomas	Nia.	16,156	121,463.96	10,093,227	4,102	205	2.46	1.2
Sarnia	Nia.	18,064	106,990.83	5,523,152	4,635	99	1.92	1.9
Stratford	Nia.	17,643	148,811.20	8,973,125	4,322	173	2.87	1.7
Sudbury	N.O.P.	20,079	164,869.12	7,262,889	4,787	126	2.87	2.3
Toronto	Nia.	638,271	4,269,560.40	325,493,864	157,869	172	2.25	1.3
Toronto D.C. and 60 cycle†			21,892.86	735,119	471	130	3.87	3.0
Welland	Nia.	10,402	55,136.71	3,095,716	2,418	106	1.90	1.8
Windsor	Nia.	98,745	800,687.22	45,364,205	23,766	159	2.81	1.8
Woodstock	Nia.	10,936	75,853.82	5,371,348	3,001	149	2.16	1.4

†This—with the exception of a relatively small D.C. power load—is a special service not created by The Hydro-Electric Power Commission but acquired through the purchase of a privately owned company. It does not include Street Railway power.

Group II—TOWNS

Amherstburg	Nia.	2,670	20,132.19	1,189,904	620	160	2.71	1.7
Barrie	G.B.	7,856	54,534.68	3,137,838	1,982	132	2.29	1.7
Bowmanville	E.O.	3,631	27,356.14	1,198,160	1,080	92	2.11	2.3
Brampton	Nia.	5,447	39,823.65	2,780,734	1,404	165	2.36	1.4
Brockville	E.O.	9,874	50,687.29	3,359,758	2,723	103	1.55	1.5
Carleton Place	E.O.	4,250	18,664.15	835,417	968	72	1.61	2.2
Cobourg	E.O.	5,837	28,708.79	1,298,712	1,245	87	1.92	2.2
Collingwood	G.B.	5,749	26,385.93	1,345,495	1,310	85	1.67	2.0
Dundas	Nia.	5,062	21,718.03	1,217,775	1,202	84	1.49	1.8
Dunnville	Nia.	3,938	13,463.00	667,353	851	68	1.36	2.0

"D"

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

Population, 10,000 or more

Commercial Light service						Power service			Total number of consumers
Revenue	Conumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of consumers	Average monthly horse-power	
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
51,037.72	2,963,254	678	364	6.27	1.7	44,062.59	109	2,494.5	3,916
69,989.55	6,388,626	1,150	463	5.07	1.1	*138,809.14	130	7,200.6	8,811
73,314.01	3,942,544	761	432	8.03	1.9	63,255.51	107	3,050.0	4,697
65,055.76	3,257,306	894	304	6.06	2.0	69,538.77	101	3,332.4	6,461
41,829.74	2,076,437	498	347	7.00	2.0	105,462.70	103	5,181.9	4,258
53,174.08	3,749,381	799	391	5.55	1.4	129,428.54	137	7,411.6	6,091
414,503.05	32,700,947	5,020	542	6.88	1.3	1,829,515.92	1,258	97,907.7	44,120
84,172.01	5,416,434	875	516	8.02	1.6	106,894.09	143	5,516.7	6,918
109,653.19	6,900,263	1,009	569	9.05	1.6	269,247.16	246	13,218.4	8,612
202,687.56	14,990,546	2,144	583	7.88	1.4	419,380.35	447	20,532.0	20,277
60,355.71	4,825,282	687	585	7.32	1.2	83,716.26	85	4,372.4	5,310
65,992.19	2,642,855	530	416	10.38	2.5	243,405.01	103	10,723.0	6,769
177,323.68	10,825,716	1,362	663	10.87	1.6	74,877.61	192	4,710.8	14,921
37,233.64	2,096,353	561	311	5.53	1.8	42,696.94	105	2,525.9	3,929
71,979.57	3,848,447	877	364	6.82	1.9	102,845.94	150	4,721.9	6,468
56,095.05	4,079,830	768	442	6.07	1.4	751,754.89	100	37,395.1	5,306
55,368.75	4,106,554	750	456	6.15	1.3	118,155.74	146	7,543.6	7,392
53,182.82	3,594,148	632	474	7.01	1.5	60,618.40	76	3,544.0	4,810
51,045.06	2,951,120	649	379	6.55	1.7	173,173.07	84	6,408.6	5,368
55,449.65	2,587,939	627	344	7.37	2.1	65,084.44	127	2,903.5	5,076
122,448.49	2,270,964	938	202	10.88	5.4	46,772.61	171	1,680.0	5,896
3,091,825.47	143,041,686	24,160	493	10.66	2.2	‡3,570,514.15	4,376	149,074.0	186,405
92,753.65	2,260,769	750	251	10.31	4.1	392,145.49	757	13,904.0	1,978
30,911.88	1,912,321	427	373	6.03	1.6	76,720.46	77	3,646.4	2,922
328,346.29	18,641,756	3,152	492	8.68	1.8	463,566.60	460	20,688.7	27,378
39,394.67	2,508,098	459	455	7.15	1.6	60,580.04	93	3,729.0	3,553

NOTE.—The above group of 25 cities utilizes about 80 per cent of the power distributed by the Commission to Ontario municipalities.

*Includes only 25-cycle data. ‡Does not include street railway power

of Population, 2,000 or more

6,685.17	318,998	119	223	4.68	2.1	6,680.79	15	250.7	754
32,656.67	1,663,623	405	342	6.72	2.0	18,969.51	45	1,042.5	2,432
9,196.36	308,455	179	144	4.28	3.0	50,855.91	30	1,725.4	1,289
16,705.80	969,269	241	335	5.78	1.7	19,667.46	52	1,189.2	1,697
25,527.68	1,619,275	448	301	4.77	1.6	35,117.17	72	1,933.0	3,243
9,858.69	365,882	188	162	4.37	2.7	29,257.71	19	1,261.9	1,175
18,389.81	692,245	294	196	5.21	2.7	27,137.06	51	1,251.9	1,590
9,932.79	432,944	200	180	4.14	2.3	14,360.70	53	930.9	1,563
11,094.35	635,112	181	293	5.10	1.7	22,154.24	37	1,343.5	1,430
12,822.59	696,238	220	263	4.85	1.8	13,545.35	28	795.4	1,099

STATEMENT

Statistics Relating to the Supply of Electric Energy to Consumers For Domestic Service, for Commercial Light Service

Group II—TOWNS

Municipality	System	Population	Domestic service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cents
Elmira	Nia.	2,352	17,436.14	794,164	519	128	2.80	2.2
Fergus	Nia.	2,623	17,357.08	1,024,740	653	132	2.24	1.7
Georgetown	Nia.	2,283	16,368.27	930,604	730	106	1.87	1.8
Goderich	Nia.	4,344	32,328.48	1,454,855	1,194	102	2.27	2.2
Hanover	G.B.	3,056	18,912.29	919,076	724	106	2.18	2.1
Hespeler	Nia.	2,877	16,378.19	690,435	720	80	1.90	2.4
Humberstone	Nia.	2,532	9,483.79	389,730	575	56	1.37	2.4
Huntsville	G.B.	2,718	11,946.41	729,695	608	100	1.64	1.6
Ingersoll	Nia.	5,158	32,553.65	1,940,814	1,340	121	2.02	1.7
Kincardine	G.B.	2,468	15,228.57	494,172	646	64	1.96	3.1
Kingsville	Nia.	2,125	14,386.98	750,629	600	104	2.00	1.9
Leamington	Nia.	5,020	29,256.31	1,610,686	1,369	98	1.78	1.8
Lindsay	E.O.	6,949	41,473.05	1,981,216	1,887	87	1.82	2.1
Listowel	Nia.	2,798	17,615.10	886,162	745	100	1.98	2.0
Long Branch	Nia.	3,746	26,412.78	1,339,310	1,179	95	1.87	2.0
Meaford	G.B.	2,762	11,819.85	498,593	665	62	1.48	2.4
Merritton	Nia.	2,530	12,690.87	820,741	640	107	1.65	1.5
Midland	G.B.	6,845	35,659.11	2,220,139	1,561	118	1.90	1.6
Mimico	Nia.	6,915	58,423.06	3,749,895	1,775	176	2.74	1.6
Napanee	E.O.	3,013	24,699.57	1,243,377	778	134	2.65	2.0
New Toronto	Nia.	8,040	37,544.52	2,418,320	1,605	126	1.95	1.6
Orangeville	G.B.	2,792	15,523.71	690,330	680	85	1.90	2.2
Paris	Nia.	4,324	23,879.14	1,522,066	1,060	120	1.88	1.6
Penetanguishene	G.B.	3,989	12,278.02	475,502	590	67	1.73	2.6
Perth	E.O.	4,215	23,396.43	1,391,090	995	117	1.96	1.7
Petrolia	Nia.	2,705	12,156.57	530,283	694	64	1.46	2.3
Picton	E.O.	3,560	23,157.64	1,168,109	1,010	96	1.91	2.0
Port Colborne	Nia.	5,844	31,354.49	1,418,605	1,360	87	1.93	2.2
Port Hope	E.O.	4,320	29,081.87	1,212,093	1,242	81	1.95	2.4
Prescott	E.O.	2,942	16,976.33	1,185,302	692	143	2.04	1.4
Preston	Nia.	6,287	34,299.98	2,010,598	1,472	114	1.94	1.7
Riverside	Nia.	4,820	38,351.60	1,733,193	1,232	117	2.59	2.2
St. Marys	Nia.	4,032	30,417.92	1,356,807	1,000	113	2.53	2.2
Simcoe	Nia.	5,503	23,086.16	1,230,730	1,305	78	1.47	1.8
Smiths Falls	E.O.	7,539	42,078.97	2,484,825	1,750	118	2.00	1.7
Strathroy	Nia.	2,886	20,493.76	1,192,016	805	123	2.12	1.7
Tecumseh	Nia.	2,472	13,256.39	438,775	517	71	2.13	3.0
Thorold	Nia.	4,959	19,597.17	1,095,183	1,128	81	1.44	1.8
Tillsonburg	Nia.	3,513	16,896.81	859,866	960	75	1.47	2.0
Trenton	E.O.	6,541	27,209.22	1,367,084	1,350	84	1.68	2.0
Walkerton	G.B.	2,428	13,673.28	695,029	544	106	2.09	2.0
Wallaceburg	Nia.	4,589	18,952.14	870,512	1,073	68	1.47	2.2
Waterloo	Nia.	8,310	63,945.76	4,517,794	1,905	198	2.80	1.4
Weston	Nia.	5,040	45,617.74	3,794,108	1,284	246	2.96	1.2
Whitby	E.O.	3,751	20,653.54	1,286,220	859	125	2.00	1.6

"D"—Continued

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

Population, 2,000 or more

Commercial Light service						Power service			
Revenue	Consumption	Number of con-sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con-sumers	Average monthly horse-power	Total number of con-sumers
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
7,119.56	237,400	119	166	4.99	3.0	6,811.88	22	357.0	660
6,739.37	234,780	113	172	4.93	2.9	16,150.81	14	616.1	780
6,479.99	270,829	131	172	4.12	2.4	24,813.57	29	972.6	890
15,963.03	643,312	228	238	5.90	2.5	12,803.02	20	607.9	1,442
6,857.13	293,997	121	202	4.72	2.3	19,204.84	23	758.1	868
6,010.46	287,908	106	226	4.73	2.1	44,606.53	29	1,774.4	855
3,552.98	222,316	50	370	5.92	1.6	3,645.81	4	110.9	629
9,253.53	519,209	130	333	5.93	1.8	13,683.77	13	880.0	751
15,887.71	953,159	240	331	5.52	1.7	30,642.25	42	1,600.5	1,622
7,433.86	232,926	121	160	5.12	3.2	11,294.02	20	486.0	787
6,656.59	292,965	150	163	3.70	2.3	4,759.00	13	194.1	763
15,821.28	845,066	254	277	5.19	1.9	21,661.42	28	971.7	1,651
26,888.95	1,059,331	336	260	6.59	2.5	31,454.78	71	1,572.7	2,294
9,612.26	456,561	156	248	5.24	2.1	14,229.25	19	621.0	920
6,427.80	358,213	115	260	4.66	1.8	2,478.50	5	114.8	1,299
6,936.27	295,171	145	170	3.99	2.3	7,617.79	19	413.9	829
2,715.84	140,642	67	175	3.37	1.9	93,192.85	10	4,395.5	717
15,144.62	840,053	215	326	5.87	1.8	52,261.39	59	3,752.2	1,835
10,466.83	498,559	138	301	6.32	2.1	11,763.77	20	485.8	1,933
14,141.44	520,695	196	221	6.01	2.7	12,315.14	31	574.7	1,005
16,166.77	1,249,769	192	542	7.02	1.3	135,158.03	34	5,702.9	1,831
9,654.06	399,525	159	209	5.06	2.4	6,951.94	26	555.7	865
8,637.45	489,346	180	227	4.00	1.8	15,245.32	23	819.0	1,263
5,792.74	234,394	99	197	4.88	2.5	15,978.08	27	669.3	716
14,648.69	626,737	204	256	5.98	2.3	16,982.39	24	802.8	1,223
7,071.87	268,576	184	122	3.20	2.6	24,292.03	62	740.0	940
14,755.08	688,782	194	295	6.34	2.1	7,708.65	34	453.5	1,238
15,449.56	832,730	229	303	5.62	1.9	15,434.76	23	608.9	1,612
12,676.94	451,710	205	184	5.15	2.8	29,382.03	43	1,172.9	1,490
9,007.78	497,374	164	253	4.58	1.8	5,507.03	18	328.0	874
17,575.80	844,263	226	311	6.48	2.1	43,535.59	49	2,305.8	1,747
4,200.95	163,920	54	252	6.48	2.5	5,094.99	8	169.5	1,294
11,641.24	454,217	180	211	5.40	2.6	20,517.02	36	738.8	1,216
27,220.90	1,553,830	329	381	6.69	1.7	27,393.42	38	1,127.4	1,672
15,879.23	760,703	269	236	4.92	2.1	26,045.57	44	1,313.7	2,063
10,556.49	485,830	166	244	5.30	2.2	15,400.64	27	692.0	998
4,135.62	143,110	45	265	7.65	2.9	2,426.30	3	90.2	565
7,242.68	454,387	145	261	4.16	1.6	39,600.66	17	1,964.0	1,290
14,113.90	728,764	231	263	5.09	1.9	13,078.28	32	651.8	1,223
18,008.53	749,385	257	243	5.84	2.4	68,825.56	50	2,560.1	1,657
8,048.17	326,197	136	200	4.93	2.5	4,621.93	17	184.0	697
11,227.19	490,427	236	173	3.97	2.3	53,569.07	29	1,730.0	1,338
23,828.49	1,218,584	247	411	8.04	2.0	32,078.70	73	1,915.0	2,225
10,330.10	645,347	178	302	4.84	1.6	42,723.17	27	1,913.7	1,489
10,317.85	473,445	158	250	5.44	2.2	16,548.94	20	613.4	1,037

STATEMENT

Statistics Relating to the Supply of Electrical Energy to Consumers For Domestic Service, for Commercial Light Service

Group III—SMALL TOWNS (less then 2,000 population),

NOTE—The power used in the smaller places and rural districts is, and possibly must always be, a relatively small proportion of the power distributed by the Commission. Thus, the power used by the small municipalities in the following group, which includes small towns, villages and certain suburban areas in townships, is less than 10 per cent of the power distributed by the Commission to Ontario municipalities. This relatively small proportion of the total power,

Municipality	System	Population	Domestic service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cents
Acton	Nia.	1,957	11,070.82	646,680	489	110	1.89	1.7
Agincourt	Nia.	P.V.	4,643.07	226,138	152	124	2.55	2.1
Ailsa Craig	Nia.	452	2,375.12	91,961	132	58	1.51	2.6
Alexandria	E.O.	1,931	7,362.03	157,853	316	42	1.94	4.7
Alliston	G.B.	1,412	9,242.00	242,655	336	60	2.24	3.8
Alvinston	Nia.	607	4,122.99	61,407	154	33	2.23	6.7
Ancaster Twp	Nia.	....	9,026.18	456,716	279	137	2.68	1.9
Apple Hill	E.O.	P.V.	1,257.58	20,742	49	35	2.14	6.1
Arkona	Nia.	408	2,786.01	49,100	100	41	2.32	5.7
Arthur	G.B.	1,052	5,068 93	105,701	185	48	2.28	4.8
Athens	E.O.	626	2,991.62	62,870	163	32	1.53	4.7
Aylmer	Nia.	1,992	10,558.95	588,932	663	74	1.33	1.8
Ayr	Nia.	763	5,369.52	284,025	211	114	2.16	1.9
Baden	Nia.	P.V.	4,004.31	223,252	144	132	2.38	1.8
Bath	E.O.	360	1,412.87	30,089	33	76	3.57	4.7
Beachville	Nia.	P.V.	3,106.21	127,489	137	78	1.89	2.4
Beaverton	G.B.	920	6,406.02	275,225	325	71	1.64	2.3
Beeton	G.B.	585	3,603.48	71,287	126	47	2.38	5.1
Belle River	Nia.	705	3,862.65	139,740	214	54	1.50	2.8
Blenheim	Nia.	1,740	9,165.05	391,284	512	64	1.49	2.3
Bloomfield	E.O.	669	3,329.82	90,524	162	47	1.71	3.7
Blyth	Nia.	632	3,476.05	93,908	170	47	1.73	3.7
Bolton	Nia.	559	3,884.52	159,747	165	81	1.96	2.4
Bothwell	Nia.	697	2,697.41	109,180	175	52	1.28	2.5
Bradford	G.B.	999	6,468.72	189,322	231	68	2.33	3.4
Brantford Twp	Nia.	....	20,934.07	999,531	865	96	2.02	2.1
Brechin	G.B.	P.V.	1,061.05	23,622	41	48	2.16	4.5
Bridgeport	Nia.	P.V.	4,105.84	147,175	132	93	2.59	2.8
Brigden	Nia.	P.V.	2,316.33	53,178	110	40	1.75	4.4
Brighton	E.O.	1,374	9,386.39	221,467	489	38	1.60	4.2
Brussels	Nia.	775	5,142.50	124,367	224	47	1.94	4.1
Burford	Nia.	P.V.	4,041.51	199,285	187	90	1.80	2.0
Burgessville	Nia.	P.V.	1,386.19	33,611	52	54	2.22	4.1
Caledonia	Nia.	1,351	5,823.38	225,651	379	50	1.29	2.6
Campbellville	Nia.	P.V.	1,385.19	29,654	46	54	2.51	4.7
Cannington	G.B.	757	5,195.85	185,009	251	61	1.73	2.8
Capreol	N.O.P.	1,750	8,901.72	156,874	328	40	2.26	5.7
Cardinal	E.O.	1,148	6,882.18	281,937	345	68	1.66	2.4
Cayuga	Nia.	700	3,702.14	99,191	140	59	2.20	3.7
Chatsworth	G.B.	302	1,824.87	50,433	83	51	1.83	3.6

"D"—Continued

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

VILLAGES AND SUBURBAN AREAS

however, exerts upon the economic life of the Province a most beneficial influence. It should further be appreciated that about 35 per cent of these municipalities obtain their power, not from Niagara, but from relatively small water-power developments throughout the Province. The net cost per kilowatt-hour given in the table is the cost inclusive of all charges. Consult also introduction to Statement "D," page 420.

Commercial Light service						Power service			
Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of consumers	Average monthly horse-power	Total number of consumers
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
4,712.30	245,074	91	224	4.31	1.9	24,199.87	15	858.2	595
1,206.03	42,141	26	135	3.87	2.9	1,559.21	3	62.5	181
1,517.17	45,297	39	98	3.28	3.3	1,304.46	2	45.9	173
5,126.81	100,103	103	81	4.15	5.1	3,698.05	16	118.7	435
5,313.51	142,800	100	119	4.43	3.7	3,234.36	14	149.6	450
2,485.79	44,255	52	71	3.98	5.6	605.72	2	24.5	208
1,740.19	77,107	39	165	3.72	2.3	485.45	5	21.8	323
933.90	20,612	21	82	3.71	4.5	273.86	1	11.0	71
1,776.66	39,903	36	94	4.17	4.5	189.05	2	5.0	138
4,188.34	84,843	83	85	4.21	4.9	2,046.46	4	94.9	272
1,317.09	34,539	44	65	2.49	3.8	1,139.57	1	34.2	208
6,924.88	358,020	144	207	4.01	1.9	4,096.20	9	195.8	816
1,871.66	67,159	47	123	3.43	2.8	402.69	4	17.1	262
1,711.19	63,488	38	145	3.91	2.7	5,548.21	3	215.3	185
906.84	17,361	18	80	4.20	5.2	....	....	.	51
533.75	19,932	22	76	2.02	2.7	10,217.79	4	387.0	163
2,709.59	132,577	66	167	3.42	2.0	1,163.84	9	70.0	400
2,327.29	48,435	40	101	4.85	4.8	1,788.07	4	74.4	170
1,809.65	60,205	40	125	3.77	3.0	1,247.02	2	31.7	256
6,749.75	310,532	124	209	4.54	2.2	4,893.31	13	175.4	649
1,411.00	41,690	28	124	4.20	3.4	634.50	5	25.7	195
1,673.22	40,658	53	65	2.66	4.1	645.55	4	38.3	227
970.74	25,455	36	59	2.25	3.8	2,396.87	9	98.5	210
1,404.70	57,245	50	95	2.34	2.5	898.78	7	74.5	232
3,581.42	79,306	66	100	4.52	4.5	3,220.54	10	177.9	307
4,235.00	226,003	53	355	6.66	1.9	3,027.14	5	132.7	923
1,092.21	22,119	27	68	3.37	4.9	1,021.88	3	36.0	71
838.84	23,945	18	111	3.88	3.5	322.23	4	11.8	154
1,904.71	46,013	43	89	3.69	4.1	686.17	5	25.5	158
4,636.19	125,729	93	113	4.15	3.7	2,565.43	10	133.7	592
2,681.71	72,451	65	94	3.46	3.7	761.23	2	25.0	291
1,098.97	52,306	30	145	3.05	2.1	1,455.34	2	61.6	219
660.12	16,442	18	76	3.06	4.0	23.21	1	4.0	71
4,037.34	190,125	90	176	3.73	2.1	2,296.42	7	88.4	476
481.09	13,738	9	127	4.45	3.5	......	...	......	55
2,523.75	77,401	75	86	2.80	3.3	761.97	10	37.5	336
3,412.41	79,051	50	132	5.69	4.3	3,412.41	1	25.0	379
1,916.92	86,177	57	126	2.80	2.2	536.64	2	14.9	404
3,198.68	79,604	58	114	4.56	4.0	1,088.27	6	41.7	204
1,223.52	30,884	33	78	3.09	4.0	... .	....	....	116

STATEMENT

Statistics Relating to the Supply of Electric Energy to Consumers For Domestic Service, for Commercial Light Service

Group III—SMALL TOWNS (less then 2,000 population),

Municipality	System	Population	Domestic service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cents
Chesley	G.B.	1,759	8,870.03	377,174	425	74	1.74	2.4
Chesterville	E.O.	1,074	5,656.44	240,430	227	88	2.08	2.4
Chippawa	Nia.	1,195	7,904.93	512,811	308	139	2.14	1.5
Clifford	Nia.	423	2,314.12	53,654	103	43	1.87	4.3
Clinton	Nia.	1,873	12,134.92	544,890	510	89	1.99	2.2
Cobden	E.O.	641	2,442.26	43,499	98	37	2.08	5.6
Colborne	E.O.	986	5,237.91	129,665	232	46	1.88	4.0
Coldwater	G.B.	617	2,725.73	136,216	136	83	1.67	2.0
Comber	Nia.	P.V.	2,136.98	61,818	97	53	1.84	3.4
Cookstown	G.B.	P.V.	2,200.67	40,834	99	34	1.85	5.4
Cottam	Nia.	P.V.	2,476.24	65,044	109	50	1.89	3.9
Courtright	Nia.	283	1,474.14	23,832	59	33	2.08	6.2
Creemore	G.B.	649	3,255.49	75,090	142	44	1.91	4.3
Dashwood	Nia.	P.V.	1,429.61	39,934	70	49	1.76	3.6
Delaware	Nia.	P.V.	1,479.43	67,245	54	104	2.28	2.2
Deseronto	E.O.	1,363	5,782.26	169,748	288	49	1.67	3.4
Dorchester	Nia.	P.V.	2,346.75	100,770	129	65	1.44	2.3
Drayton	Nia.	568	3,100.20	98,426	155	53	1.67	3.1
Dresden	Nia.	1,509	6,334.26	249,104	385	54	1.37	2.5
Drumbo	Nia.	P.V.	2,056.83	76,950	85	75	2.02	2.7
Dublin	Nia.	P.V.	1,385.20	25,660	46	48	2.59	5.4
Dundalk	G.B.	646	3,059.80	102,566	170	50	1.50	3.0
Durham	G.B.	1,823	6,805.65	282,154	418	56	1.36	2.4
Dutton	Nia.	810	3,193.72	155,308	208	62	1.28	2.1
East York Twp.	Nia.	....	192,880.12	10,071,336	9,319	90	1.72	1.9
Elmvale	G.B.	P.V.	2,828.21	101,507	159	53	1.48	2.8
Elmwood	G.B.	P.V.	1,254.73	23,369	63	31	1.66	5.4
Elora	Nia.	1,143	7,648.43	307,954	317	82	2.03	2.5
Embro	Nia.	434	2,843.19	115,738	101	95	2.35	2.5
Erieau	Nia.	286	3,838.45	101,690	171	50	1.87	3.8
Erie Beach	Nia.	....	1,613.89	22,000	69	27	1.95	7.3
Essex	Nia.	1,748	7,807.69	352,268	454	65	1.43	2.2
Etobicoke Twp.	Nia.	....	127,981.44	8,788,147	3,705	198	2.88	1.5
Exeter	Nia.	1,658	11,102.39	545,591	449	102	2.07	2.0
Finch	E.O.	368	2,059.40	66,037	84	65	2.04	3.1
Flesherton	G.B.	469	2,646.04	73,364	138	44	1.60	3.6
Fonthill	Nia.	800	4,893.25	187,888	211	74	1.93	2.6
Forest	Nia.	1,475	10,787.73	443,820	448	81	1.98	2.4
Glencoe	Nia.	903	5,278.55	189,926	216	73	2.04	2.8
Grand Valley	G.B.	572	3,276.79	80,029	159	42	1.72	4.1

"D"—Continued

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

VILLAGES AND SUBURBAN AREAS

Commercial Light service						Power service			
Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of consumers	Average monthly horse-power	Total number of consumers
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
4,583.03	188,276	99	158	3.86	2.4	8,478.41	20	369.7	544
3,231.78	114,730	69	138	3.90	2.8	2,471.49	4	102.0	300
1,934.56	101,494	47	180	3.42	1.9	1,312.74	3	42.2	358
1,642.52	42,180	38	93	3.60	3.9	389.19	1	14.0	142
6,538.51	247,264	130	160	4.24	2.6	5,123.85	15	207.2	655
2,792.07	39,568	50	66	4.65	7.1	404.94	1	10.5	149
3,323.63	86,372	73	99	3.79	3.8	834.17	5	47.0	310
1,738.06	55,751	47	99	3.08	3.1	4,301.22	2	196.7	185
2,294.01	62,130	47	110	4.07	3.7	3,313.66	3	89.8	147
1,321.98	27,218	31	73	3.55	4.9	780.84	3	47.3	133
1,205.08	46,403	29	133	3.46	2.6	370.96	1	15.0	139
1,000.80	18,792	26	60	3.21	5.3	763.24	1	12.5	86
1,946.40	44,618	55	68	2.95	4.4	991.08	2	53.6	199
907.25	19,082	30	58	2.75	4.8	1,184.60	2	38.1	102
611.39	19,745	19	87	2.68	3.1	....	...	...	73
2,328.23	51,610	65	66	2.98	4.5	1,935.65	8	73.7	361
868.85	32,677	27	100	2.68	2.7	550.57	2	36.0	158
1,985.09	58,705	50	98	3.31	3.4	1,137.12	4	51.3	209
5,002.54	222,942	112	166	3.72	2.2	4,386.11	10	186.5	507
835.28	25,194	23	91	3.03	3.3	750.36	1	23.0	109
793.68	15,345	21	56	2.88	5.2	270.71	2	12.5	69
2,735.97	84,078	72	97	3.17	3.3	2,783.39	4	147.2	246
4,560.61	185,169	106	146	3.59	2.5	4,437.37	11	225.4	535
2,509.30	100,697	66	127	3.17	2.5	3,476.07	8	151.8	282
26,828.11	1,476,254	397	310	5.63	1.8	36,047.10	33	1,561.0	9,749
1,742.63	68,222	59	96	2.46	2.6	2,985.82	7	139.0	225
710.07	15,050	20	63	2.96	4.7	1,537.98	1	41.2	84
3,685.24	138,426	71	161	4.30	2.7	2,931.26	2	126.8	390
1,577.02	40,480	44	77	2.99	3.9	1,203.93	1	38.3	146
1,371.26	32,389	13	208	8.79	4.2	564.66	2	21.1	186
318.35	6,563	3	182	8.84	4.9	....	.... ..	....	72
5,910.84	284,735	118	201	4.17	2.1	7,536.78	18	313.8	590
18,317.97	1,019,480	240	354	6.36	1.8	18,755.34	28	871.1	3,973
5,261.66	187,941	117	136	3.80	2.8	3,782.01	9	183.3	575
1,532.62	40,461	34	99	3.76	3.8	348.55	1	8.4	119
1,711.99	50,736	48	88	2.97	3.4	329.69	2	20.6	188
1,368.12	64,691	27	200	4.21	2.1	569.71	4	21.0	242
5,561.16	181,026	115	133	4.08	3.1	4,762.57	21	187.6	584
3,283.93	95,890	81	99	3.38	3.4	3,218.64	6	109.0	303
1,831.38	49,906	50	82	3.05	3.7	1,719.16	5	73.3	214

STATEMENT

Statistics Relating to the Supply of Electric Energy to Consumers For Domestic Service, for Commercial Light Service

Group III—SMALL TOWNS (less then 2,000 population),

Municipality	System	Population	Domestic service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cents
Granton	Nia.	P.V.	1,943.51	77,764	82	79	1.97	2.5
Gravenhurst	G.B.	1,997	9,602.96	600,470	510	98	1.57	1.6
Hagersville	Nia.	1,374	5,263.50	261,898	335	65	1.30	2.0
Harriston	Nia.	1,325	7,621.37	251,573	340	62	1.87	3.0
Harrow	Nia.	933	8,086.14	446,179	259	143	2.60	1.8
Hastings	E.O.	817	4,021.17	98,906	192	43	1.75	4.1
Havelock	E.O.	1,161	5,527.21	153,569	288	44	1.60	3.6
Hensall	Nia.	702	4,217.41	148,369	186	67	1.89	2.8
Highgate	Nia.	334	1,681.07	50,490	98	43	1.43	3.3
Holstein	G.B.	P.V.	1,215.41	14,300	56	21	1.81	8.5
Jarvis	Nia.	495	2,527.92	70,388	134	43	1.57	3.7
Kemptville	E.O.	1,330	7,030.92	262,212	334	65	1.75	2.7
Kirkfield	G.B.	P.V.	781.63	11,461	29	33	2.25	6.8
Lakefield	E.O.	1,374	6,229.34	212,392	319	55	1.63	3.0
Lambeth	Nia.	P.V.	3,237.04	165,386	118	117	2.29	2.0
Lanark	E.O.	673	2,912.93	64,867	159	34	1.53	4.5
Lancaster	E.O.	602	2,174.26	33,870	83	34	2.18	6.4
La Salle	Nia.	687	6,326.32	269,696	185	121	2.85	2.3
London Twp.	Nia.	....	12,142.83	873,223	372	169	2.72	1.4
Lucan	Nia.	643	4,475.79	180,422	168	89	2.20	2.5
Lucknow	G.B.	1,062	6,666.81	193,144	279	58	1.99	3.5
Lynden	Nia.	P.V.	2,159.32	73,640	85	72	2.12	2.9
Madoc	E.O.	1,253	4,515.58	146,331	276	44	1.36	3.1
Markdale	G.B.	791	3,699.56	146,218	202	60	1.53	2.5
Markham	Nia.	1,114	7,488.53	316,704	290	91	2.15	2.4
Marmora	E.O.	986	3,761.43	68,496	206	28	1.52	5.5
Martintown	E.O.	P.V.	849.80	15,968	42	32	1.68	5.3
Maxville	E.O.	699	3,643.62	59,494	145	34	2.09	6.1
Merlin	Nia.	P.V.	2,129.31	56,819	110	43	1.61	3.7
Mildmay	G.B.	755	2,812.62	81,304	149	46	1.57	3.5
Milton	Nia.	1,739	12,099.94	569,045	456	104	2.21	2.1
Milverton	Nia.	992	5,476.45	237,623	235	86	1.97	2.3
Mitchell	Nia.	1,567	11,315.97	639,132	447	120	2.12	1.8
Moorefield	Nia.	P.V.	1,195.37	25,213	61	34	1.63	4.7
Mt. Brydges	Nia.	P.V.	2,771.50	138,270	136	85	1.70	2.0
Mt. Forest	G.B.	1,743	8,377.09	402,670	468	72	1.49	2.1
Neustadt	G.B.	484	1,853.50	25,013	90	23	1.72	7.4
Newbury	Nia.	282	1,258.85	26,307	70	31	1.50	4.8
New Hamburg	Nia.	1,456	9,408.29	461,888	353	111	2.25	2.0
Niagara-on-the-Lake	Nia.	1,815	14,401.87	945,455	485	162	2.47	1.5

"D"—Continued

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

VILLAGES AND SUBURBAN AREAS

Commercial Light service						Power service			
Revenue	Consumption	Number of con-sumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of con-sumers	Average monthly horse-power	Total number of con-sumers
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
1,037.98	37,593	34	92	2.54	2.8	785.37	1	42.0	117
6,926.81	384,990	118	272	4.89	1.8	9,742.23	15	437.3	643
4,897.97	259,220	108	200	3.78	1.9	12,336.54	14	571.1	457
4,858.78	154,857	102	127	3.97	3.1	5,864.35	14	237.2	456
4,226.32	172,680	76	189	4.63	2.4	4,413.83	5	163.3	340
1,830.40	37,242	53	59	2.88	4.9	268.02	4	17.1	249
2,654.12	66,812	60	93	3.69	4.0	2,555.97	3	88.5	351
1,906.39	53,754	55	84	2.97	3.5	2,554.46	13	114.0	254
893.68	23,508	34	58	2.19	3.8	1,242.58	6	56.8	138
563.40	7,434	18	34	2.61	7.6	110.93	1	6.9	75
1,910.26	63,378	43	123	3.70	3.0	3,870.22	4	132.4	181
4,338.47	169,714	87	162	4.16	2.6	5,323.23	8	197.0	429
1,181.88	21,910	18	100	5.47	5.4	....	....	....	47
3,891.35	154,980	70	184	4.63	2.5	2,969.90	7	171.2	396
1,368.21	47,031	27	145	4.22	2.9	567.42	1	27.5	146
1,305.01	37,183	35	89	3.11	3.5	....	....	....	194
1,877.32	21,955	35	62	4.47	7.2	....	....	....	118
1,398.45	43,242	14	257	8.32	3.2	2,434.27	3	71.8	202
2,397.36	132,943	21	527	9.51	1.8	1,900.28	4	67.0	397
1,755.49	52,980	45	101	3.36	3.3	462.39	6	22.5	219
3,261.27	88,186	86	85	3.16	3.7	4,949.34	6	142.4	371
925.39	36,434	19	160	4.06	2.5	891.84	1	39.7	105
3,305.46	101,067	87	97	3.17	3.3	1,255.15	6	45.4	369
2,553.78	103,017	80	107	2.66	2.5	1,028.46	10	74.3	292
2,756.31	115,060	70	137	3.28	2.4	2,951.03	8	118.2	368
1,894.65	47,399	47	84	3.36	4.0	355.58	3	29.5	256
1,007.20	23,940	22	91	3.81	4.2	....	....	....	64
2,752.91	48,902	49	83	4.68	5.6	....	....	....	194
1,574.81	47,651	43	92	3.05	3.3	1,107.96	1	32.9	154
1,990.89	44,494	44	84	3.77	4.5	972.11	3	27.5	196
5,632.05	244,152	106	192	4.43	2.3	11,529.69	13	464.2	575
3,234.59	112,165	81	120	3.46	2.9	3,280.63	7	180.3	323
5,092.62	282,206	115	206	3.72	1.8	4,611.41	22	249.0	584
681.64	12,729	23	46	2.47	5.4	1,246.19	2	47.9	86
881.51	40,980	36	95	2.04	2.1	933.36	3	32.0	175
6,216.20	273,522	147	155	3.52	2.3	5,029.82	14	279.2	629
1,168.13	20,449	24	71	4.06	5.7	31.62	1	2.0	115
785.29	15,612	27	48	2.42	5.0	785.73	2	38.9	99
4,302.25	146,860	97	127	3.72	2.9	5,527.05	13	240.7	463
4,269.72	232,715	83	233	4.28	1.8	2,963.19	10	111.7	578

STATEMENT

Statistics Relating to the Supply of Electric Energy to Consumers For Domestic Service, for Commercial Light Service

Group III—SMALL TOWNS (less then 2,000 population),

Municipality	System	Population	Domestic service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cents
Nipigon	T.B.	P.V.	2,847.93	86,943	147	49	1.61	3.3
North York Twp.	Nia.		119,894.55	6,267,163	3,350	156	2.98	1.9
Norwich	Nia.	1,163	8,594.84	459,340	351	109	2.04	1.9
Norwood	E.O.	753	4,525.06	135,797	214	53	1.76	3.3
Oil Springs	Nia.	472	1,571.85	54,441	79	57	1.66	2.9
Omemee	E.O.	588	2,592.53	68,117	140	41	1.54	3.8
Otterville	Nia.	P.V.	2,326.46	87,188	115	63	1.69	2.7
Paisley	G.B.	752	3,762.60	83,913	182	38	1.72	4.5
Palmerston	Nia.	1,410	9,312.57	461,488	384	100	2.02	2.0
Parkhill	Nia.	979	5,346.70	112,470	248	38	1.81	4.8
Plattsville	Nia.	P.V.	2,606.03	62,391	96	54	2.24	4.2
Point Edward	Nia.	1,290	5,866.98	217,012	316	57	1.55	2.7
Port Credit	Nia.	1,750	13,988.44	967,270	453	179	2.59	1.4
Port Dalhousie	Nia.	1,408	15,183.73	1,041,129	615	141	2.05	1.5
Port Dover	Nia.	1,606	7,617.85	314,750	529	49	1.20	2.4
Port Elgin	G.B.	1,270	7,372.51	354,302	403	73	1.52	2.1
Port McNicoll	G.B.	935	3,200.33	115,069	209	46	1.28	2.1
Port Perry	G.B.	1,125	6,508.26	313,317	304	86	1.78	2.1
Port Rowan	Nia.	666	3,158.19	62,443	109	47	2.41	5.1
Port Stanley	Nia.	769	12,376.21	664,078	621	89	1.66	1.9
Priceville	G.B.	P.V.	663.91	10,844	31	29	1.78	6.1
Princeton	Nia.	P.V.	2,144.06	70,196	78	75	2.29	3.1
Queenston	Nia.	P.V.	3,264.77	194,980	67	242	4.06	1.7
Richmond	E.O.	420	1,803.38	41,027	59	58	2.55	4.4
Richmond Hill	Nia.	1,234	7,456.15	487,810	334	122	1.86	1.5
Ridgetown	Nia.	1,985	9,568.29	471,022	562	70	1.42	2.0
Ripley	G.B.	454	3,171.01	62,292	120	43	2.20	5.1
Rockwood	Nia.	P.V.	3,257.01	140,397	155	76	1.75	2.3
Rodney	Nia.	713	3,355.45	113,653	216	44	1.29	3.0
Rosseau	G.B.	305	3,270.74	47,762	62	64	4.40	6.8
Russell	E.O.	P.V.	2,633.67	46,501	113	34	1.94	5.7
St. Clair Beach	Nia.	148	2,140.45	75,617	45	140	3.96	2.8
St. George	Nia.	P.V.	3,045.01	126,162	136	77	1.87	2.4
St. Jacobs	Nia.	P.V.	4,211.45	200,454	120	139	2.92	2.1
Scarboro Twp.	Nia.	....	100,992.24	5,305,757	4,653	95	1.81	1.9
Seaforth	Nia.	1,717	10,741.71	521,499	471	91	1.88	2.1
Shelburne	G.B.	1,102	5,578.95	199,697	281	59	1.66	2.8
Southampton	G.B.	1,321	7,530.59	298,755	423	59	1.48	2.5
Springfield	Nia.	386	1,803.42	56,913	97	48	1.55	3.2
Stamford Twp.	Nia.	....	59,017.71	4,331,666	1,728	208	2.84	1.4

"D"—Continued

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

VILLAGES AND SUBURBAN AREAS

Commercial Light service						Power service			Total number of consumers
Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of consumers	Average monthly horse-power	
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
2,119.01	69,503	37	157	4.77	3.0	807.81	2	50.3	186
18,836.85	716,982	282	212	5.57	2.6	34,170.57	39	1,082.2	3,671
3,900.65	171,154	90	158	3.61	2.3	2,293.73	7	119.5	448
2,175.37	45,875	58	66	3.13	4.7	703.27	2	24.5	274
1,448.26	46,255	31	124	3.89	3.1	7,478.58	33	186.0	143
1,648.46	54,086	44	102	3.12	3.0	2,585.60	6	105.8	190
1,790.58	61,373	43	119	3.47	2.9	475.64	3	16.8	161
2,608.32	72,483	51	118	4.26	3.6	1,017.46	4	32.7	237
4,627.19	182,787	94	162	4.10	2.5	6,433.89	14	360.4	492
3,448.26	87,315	74	96	3.78	3.9	837.86	3	19.0	325
1,067.28	28,259	25	94	3.55	3.8	1,067.39	1	35.3	122
2,024.66	57,470	50	96	3.37	3.5	29,807.50	9	1,158.0	375
5,509.18	312,138	81	321	5.67	1.8	4,792.94	7	174.9	541
2,481.65	130,900	46	237	4.49	1.9	6,208.26	13	306.2	674
4,257.23	171,873	126	114	2.81	2.5	5,332.01	13	252.0	668
4,323.16	176,739	100	147	3.60	2.4	4,145.30	9	215.8	512
686.61	25,407	25	84	2.29	2.7	....	....	....	234
3,120.54	88,417	75	98	3.47	3.5	3,355.22	11	146.5	390
1,761.05	33,847	39	72	3.76	5.2	69.22	1	3.5	149
3,849.80	149,536	100	125	3.21	2.6	4,518.99	8	168.0	729
285.18	4,246	9	39	2.64	6.7	....	....	....	40
724.91	21,116	19	93	3.18	3.4	2,658.72	3	81.8	102
966.00	42,684	11	323	7.31	2.3	....	....	....	78
1,800.79	44,344	25	148	6.00	4.1	....	....	....	84
3,693.45	206,388	63	273	4.88	1.8	2,227.03	16	141.8	413
5,794.68	268,826	140	160	3.45	2.2	4,378.72	20	215.5	722
1,505.39	21,815	46	40	2.73	6.9	....	....	....	166
1,132.44	42,305	32	110	2.95	2.7	459.08	2	13.9	189
2,407.71	69,707	76	76	2.64	3.5	2,318.49	6	91.0	298
846.82	11,805	21	47	3.36	7.2	....	....	....	83
1,405.60	30,176	33	76	3.55	4.7	....	....	....	146
2,344.87	72,918	3	2,025	65.13	3.2	81.80	1	3.3	49
1,413.22	47,786	36	111	3.27	3.0	2,587.47	2	87.7	174
1,481.09	49,493	28	147	4.41	3.0	3,903.16	7	156.9	155
20,958.73	1,029,893	367	234	4.76	2.0	24,179.46	38	946.3	5,058
5,626.59	257,678	118	178	3.89	2.2	5,700.63	16	278.7	605
3,698.14	123,945	83	124	3.71	3.0	2,779.28	14	175.8	378
3,022.75	97,801	78	104	3.23	3.1	3,482.42	9	233.3	510
813.73	25,498	30	71	2.26	3.2	1,420.65	3	46.9	130
7,741.84	484,974	126	321	5.12	1.6	13,247.51	15	700.1	1,869

STATEMENT

Statistics Relating to the Supply of Electric Energy to Consumers For Domestic Service, for Commercial Light Service

Group III—SMALL TOWNS (less than 2,000 population),

Municipality	System	Population	Domestic service					
			Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.
			$ c.	kw-hr.		kw-hr.	$ c.	cents
Stayner	G.B.	1,008	4,658.16	202,956	257	66	1.51	2.3
Stirling	E.O.	965	5,387.20	301,969	278	91	1.61	1.8
Stouffville	Nia.	1,149	7,074.18	258,150	369	58	1.60	2.7
Streetsville	Nia.	676	5,895.04	251,495	210	100	2.34	2.3
Sunderland	G.B.	P.V.	2,443.77	54,761	119	38	1.71	4.5
Sutton	Nia.	804	7,926.33	234,380	407	48	1.62	3.4
Tara	G.B.	509	2,762.15	79,080	135	49	1.71	3.5
Tavistock	Nia.	1,029	6,874.53	369,354	265	117	2.19	1.9
Teeswater	G.B.	837	4,393.72	93,800	204	38	1.80	4.7
Thamesford	Nia.	P.V.	2,667.25	134,409	126	90	1.76	2.0
Thamesville	Nia.	769	3,696.70	163,669	224	61	1.38	2.3
Thedford	Nia.	583	3,003.70	59,698	130	38	1.92	5.0
Thorndale	Nia.	P.V.	1,582.29	40,191	69	49	1.91	3.9
Thornton	G.B.	P.V.	1,324.85	21,113	59	30	1.87	6.3
Tilbury	Nia.	1,975	7,272.74	332,367	440	63	1.38	2.2
Toronto Twp.	Nia.		65,834.51	3,778,147	2,058	153	2.66	1.7
Tottenham	G.B.	539	3,290.03	64,102	130	41	2.11	5.1
Trafalgar Twp. Area No. 1	Nia.	. .	14,145.61	689,570	323	178	3.65	2.1
Trafalgar Twp. Area No. 2	Nia.	....	6,296.42	244,377	158	129	3.32	2.6
Tweed	E.O.	1,276	5,873.14	138,689	275	42	1.78	4.2
Uxbridge	G.B.	1,451	8,414.29	303,740	378	67	1.86	2.8
Victoria Harbor	G.B.	1,077	3,091.87	85,949	191	37	1.35	3.6
Wardsville	Nia.	257	1,091.53	18,241	49	31	1.86	6.0
Warkworth	E.O.	P.V.	2,302.50	38,818	106	31	1.81	5.9
Waterdown	Nia.	912	5,693.23	319,780	230	115	2.06	1.8
Waterford	Nia.	1,173	6,346.32	342,595	336	85	1.57	1.9
Watford	Nia.	916	6,435.98	250,658	280	75	1.92	2.6
Waubaushene	G.B.	P.V.	2,450.52	121,380	161	63	1.27	2.0
Wellesley	Nia.	P.V.	2,826.73	78,699	123	52	1.88	3.6
Wellington	E.O.	920	5,157 16	231,119	299	64	1.44	2.2
West Lorne	Nia.	752	2,943.88	105,597	188	47	1.30	2.8
Westport	E.O.	709	3,113.90	62,801	100	52	2.59	5.0
Wheatley	Nia.	723	4,236.99	124,893	178	58	1.98	3.4
Wiarton	G.B.	1,715	8,763.38	196,885	368	45	1.98	4.4
Williamsburg	E.O.	P.V.	3,722.56	234,281	118	165	2.63	1.6
Winchester	E.O.	1,057	6,744.84	357,777	284	105	1.98	1.9
Windermere	G.B.	153	2,622.56	35,269	49	60	4.46	7.4
Wingham	G.B.	1,987	12,002.35	494,472	535	77	1.87	2.4
Woodbridge	Nia.	811	6,576.86	314,339	256	102	2.14	2.1
Woodville	G.B.	390	2,137.07	62,623	112	47	1.59	3.4
Wyoming	Nia.	504	2,763.38	64,256	137	39	1.70	4.3
Zurich	Nia.	P.V.	3,091.42	81,138	121	56	2.12	3.8

"D"—Concluded

in Ontario Municipalities Served by the Commission and for Power Service during the Year 1936

VILLAGES AND SUBURBAN AREAS

Commercial Light service						Power service			Total number of consumers
Revenue	Consumption	Number of consumers	Average monthly consumption	Average monthly bill	Net cost per kw-hr.	Revenue	Number of consumers	Average monthly horse-power	
$ c.	kw-hr.		kw-hr.	$ c.	cents	$ c.			
3,061.29	116,626	87	112	2.92	2.6	2,430.86	10	152.3	354
3,531.46	136,778	86	133	3.42	2.6	1,801.56	9	86.3	373
3,235.80	98,817	83	99	3.25	3.3	946.48	5	38.9	457
....	....	.....	....	.....	....	3,576.69	4	103.7	214
1,728.54	43,137	46	78	3.13	4.0	132.68	2	8.3	167
3,495.36	110,458	77	120	3.78	3.2	1,106.23	3	29.2	487
1,638.33	52,119	37	117	3.70	3.1	1,154.75	4	35.8	176
2,499.63	125,761	80	134	2.65	2.0	9,676.52	8	364.5	353
2,654.47	55,635	58	80	3.81	4.8	1,412.78	6	107.4	268
1,427.54	67,965	41	138	2.90	2.1	2,132.63	7	87.5	174
2,852.59	117,356	76	129	3.13	2.4	1,678.76	7	73.6	307
1,857.33	32,930	44	63	3.56	5.7	1,364.61	3	36.5	177
829.96	21,097	18	98	3.84	3.9	224.77	1	5.4	88
540.59	9,303	12	64	3.75	7.0	318.50	2	15.8	73
8,596.60	417,692	138	252	5.19	2.1	9,999.99	10	650.8	538
14,963.36	706,541	185	318	6.74	2.1	10,128.68	36	456.3	2,279
1,793.45	26,309	51	43	2.93	6.8	555.60	7	31.1	188
699.83	20,680	2	862	29.16	3.3	756.45	9	32.3	334
.....	....	....	....	......	......	....	....	....	158
4,475.02	90,500	96	79	3.88	4.9	2,953.98	11	109.8	382
3,831.22	103,413	95	91	3.36	3.7	923.07	10	67.0	483
867.49	29,829	31	80	2.33	2.9	162.24	2	6.0	224
1,154.84	20,738	24	72	4.01	5.6	....	......	....	73
1,721.72	39,557	48	69	2.99	4.4	....	......	....	154
1,746.91	94,230	34	231	4.28	1.8	1,697.37	6	87.0	270
2,018.38	130,970	67	162	2.51	1.5	4,755.70	11	245.6	414
3,637.31	130,380	78	139	3.89	2.8	3,308.65	5	111.0	363
630.45	26,950	23	98	2.28	2.3	181.62	3	7.5	187
1,498.62	37,405	48	68	2.71	4.0	1,904.90	6	63.9	177
1,996.76	68,661	62	92	2.68	2.9	2,156.09	5	76.1	366
1,387.51	53,367	49	91	2.36	2.6	1,659.23	5	76.5	242
2,901.65	55,601	55	84	4.40	5.2	....	...	......	155
2,730.36	79,028	71	93	3.20	3.5	2,156.78	3	72.2	252
6,967.76	139,678	115	101	5.05	5.0	4,575.66	16	167.0	499
6,156.10	338,365	60	470	8.51	1.8	205.09	1	13.4	179
3,452.19	147,417	72	171	4.00	2.3	1,435.02	3	47.6	359
1,083.76	18,939	14	113	6.45	5.7	......	.....	.....	61
6,911.13	248,229	142	146	4.06	2.8	10,006.52	24	379.3	701
1,986.55	74,480	50	124	3.31	2.7	5,711.57	7	252.2	313
1,227.82	28,780	32	75	3.20	4.3	734.65	2	36.0	146
1,698.11	39,625	47	70	3.01	4.3	445.38	3	21.0	187
2,258.38	47,380	49	81	3.88	4.8	......	....	......	170

STATEMENT "E"

Cost of Power to Municipalities and Rates to Consumers for Domestic Service—Commercial Light Service—Power Service in Ontario Urban Municipalities Served by The Hydro-Electric Power Commission For the Year 1936

In Statement "E" are presented the rate schedules applicable to consumers for domestic service, for commercial light service and for power service in each of the co-operating municipalities receiving service at cost through The Hydro-Electric Power Commission.* The cost per horsepower of the power supplied at wholesale by the Commission to the municipality, an important factor in determining rates to consumers, is also stated.

Cost of Power to Municipalities

The figures in the first column represent the total cost for the year of the power supplied by the Commission to the municipality, divided by the number of horsepower supplied. Details respecting these costs are given in the "Cost of Power" tables relating to the several systems, as presented in Section IX, and an explanation of the items making up the cost of power is given in the introduction to that Section.

Rates to Consumers

The Power Commission Act stipulates that "The rates chargeable by any municipal corporation generating or receiving and distributing electrical power or energy shall at all times be subject to the approval and control of the Commission." In accordance with the Act and in pursuance of its fundamental principle of providing service at cost, the Commission requires that accurate cost records be kept in each municipality, and exercises a continuous supervision over the rates charged to consumers.

At the commencement of its operations, the Commission introduced scientifically-designed rate schedules for each of the three main classes into which the electrical service is usually divided, namely: residential or domestic service, commercial light service, and power service, and the schedules in use during the past year are presented in the tables of this statement.

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*Except townships served as parts of rural power districts, for which consult latter part of Section III.

Domestic Service: Domestic rates apply to electrical service in residences, for all household purposes, including lighting, cooking and the operation of all domestic appliances.

Commercial Light Service: Electrical energy used in stores, offices, churches, schools, public halls and institutions, hotels, public boarding-houses, and in all other premises for commercial purposes, including sign and display lighting, is billed at commercial lighting rates.

Water-Heater Service: For all consumers using continuous electric water heaters, low flat rates are available consisting of a fixed charge per month dependent on the capacity of the heating element and the cost of power to the municipal utility. Such heaters are so connected that the electrical energy they consume is not metered. For new installations the necessary equipment, including heater, thermostat, efficient insulation for water-storage tank, and wiring, is installed by The Hydro-Electric Power Commission of Ontario without capital cost to the consumer or to the municipal electric utility.†

Power Service: The rate schedules given for power service in Statement "E" are those governing the supply of power at retail by each of the local municipal utilities. The average amount of power sold, per consumer, under these rates is approximately 40 horsepower—consult Statement "D". The Commission serves certain large power consumers direct on behalf of the various systems of municipalities.

The rates for power service, as given in the tables, are the rates for 24-hour unrestricted power at secondary distribution voltage. For service at primary distribution voltage the rates are usually five per cent lower than those stated. In municipalities where load conditions and other circumstances permit, lower rates are available for 10-hour power, and for other forms of restricted service. For these classifications, discounts additional to those listed in the table are applicable.

The service charge relates to the connected load or to the maximum demand, as measured by a 10-minute average peak, where a demand meter is installed. The prompt payment discount of 10 per cent on the total monthly bill is given for settlement within 10 days.

Under the tabulation of rates for power service there is a column headed "Basis of rate 130 hours' monthly use of demand." This column shows approximately the net annual amount payable for a demand of one horsepower, assuming a monthly use of 130 hours, which includes 30 hours' use each month at the third energy rate. Broadly, the figures in this column serve to indicate approximately the relative cost of power service in the different municipalities listed.

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†In addition, the Commission supplies booster water-heating equipment to furnish extra requirements beyond the capacity of the continuous heater; current for the booster heater is measured and charged for at the regular rates.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate: Number of kw-hrs. per month	First rate: Per kw-hr. per month	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
	$ c.	cents		cents	cents	$ c.	%
Acton	31.02	33-66	60	2.2	1.1	0.83	10
Agincourt	37.08	33-66	50	3.5	1.5	1.11	10
Ailsa Craig	47.29	....	60	3.5	1.2	0.83	10
Alexandria T	54.74	33-66	60	5	2	1.11	10
Alliston	47.35	33-66	40	4.5	2	.139	10
Alvinston	71.84	33-66	60	6	2	1.94	10
Amherstburg T	33.82	....	60	3.6	1.3	0.83	10
Ancaster twp.	31.33	33-66	55	3	1.5	0.83	10
Apple Hill	44.13	33-66	60	6	2	1.66	10
Arkona	72.30	33-66	55	6	2	1.94	10
Arthur	63.05	33-66	40	6	2	1.67	10
Athens	44.45	33-66	50	4.5	1.5	1.11	10
Aylmer T	32.61	......	60	2.8	1	0.83	10
Ayr	32.00	33-66	55	3	1.25	1.11	10
Baden	31.46	33-66	60	2.2	1.2	0.83	10
Barrie T	29.83	....	60	3	1.1	0.83	10
Bath	68.83	33-66	40	6	2	3.33	10
Beachville	31.68	33-66	55	3	1.5	0.83	10
Beaverton	37.11	......	60	3	1	1.11	10
Beeton	62.14	33-66	40	6	2	1.67	10
Belle River	36.76	....	60	4	1.3	1.11	10
Belleville C	28.75	....	55	3	1	0.98	15 & 10
Blenheim	36.58	......	60	3	1.2	0.83	10
Bloomfield	47.55	33-66	50	3.6	1.5	1.11	10
Blyth	49.13	33-66	50	3.75	1.5	1.39	10
Bolton	39.28	33-66	55	3.5	1.6	1.11	10
Bothwell	45.60	......	60	3	1.1	0.83	10
Bowmanville T	31.72	......	60	4	1.3	0.83	10
Bradford	51.49	33-66	35	5.3	1.5	1.67	10
Brampton T	29.53	33-66	60	2	1	0.83	10
Brantford C	26.35	33-66	60	2	1	0.83	10
Brantford twp.	30.63	33-66	60	2.5	1.25	1.11	10
Brechin	44.74	33-66	45	5	1.5	1.67	10
Bridgeport	32.90	33-66	50	4	1.5	1.11	10
Brigden	60.83	33-66	60	4	2	1.38	10
Brighton	33.10	......	60	4.8	1.5	1.11	10
Brockville T	27.06	33-66	50	2	1	0.83	10 & 10
Brussels	45.94	......	50	4.5	2	1.66	10
Burford	33.62	.....	60	3.2	1.1	1.11	10
Burgessville	52.23	33-66	50	5	2	1.39	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

"E"

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	2.2	0.6	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	3.5	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	3	0.75	0.83	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	5	1	1.66	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	4.5	1	1.39	10	35.00	1.00	3.5	2.3	0.33	....	....	10
7.5	6	1	1.94	10	59.00	1.00	7.1	4.7	0.33	....	....	10
5	2.8	0.75	0.83	10	33.00	1.00	3.2	2.1	0.33	....	....	10
5	3	0.75	0.83	10	31.00	1.00	2.9	1.9	0.33	....	....	10
5	6	1	1.66	10	55.00	1.00	6.5	4.3	0.33	....	....	10
7.5	6	1	1.94	10	55.00	1.00	6.5	4.3	0.33	....	....	10
5	6	1	1.67	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	4.5	1	1.11	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	2.1	0.6	0.83	10	26.00	1.00	2.2	1.4	0.33	....	....	10
5	3	0.75	1.11	10	38.00	1.00	4	2.6	0.33	....	....	10
5	2.5	0.75	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
5	2.2	1	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	6	1	3.33	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	3	0.75	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
5	2	1	1.11	10	25.00	1.00	2	1.3	0.33	....	....	10
5	6	1	1.67	10	38.00	1.00	4	2.6	0.33	....	....	10
5	3.2	0.75	1.11	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	2.3	0.5	0.92	10 & 10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	2.3	0.75	0.83	10	32.00	1.00	3.1	2	0.33	....	....	10
5	3.6	1	1.11	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	3.75	1	1.39	10	48.00	1.00	5.4	3.6	0.33	....	....	10
5	3.5	1	1.11	10	32.00	1.00	3.1	2	0.33	....	....	10
5	2.5	0.75	0.83	10	36.00	1.00	3.7	2.4	0.33	....	....	10
5	3	0.8	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	5.3	1	1.67	10	38.00	1.00	4	2.6	0.33	....	....	10
5	2	0.75	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
....	†3.5 ††1.75	0.35	0.83	10	21.00	1.00	1.8	1.1	0.33	....	10	10
5	2.5	0.75	1.11	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	5	1	.167	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	4	0.75	1.11	10	32.00	1.00	3.1	2	0.33	....	....	10
5	4	1	1.38	10	48.00	1.00	5.4	3.6	0.33	....	....	10
5	4.4	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	2	0.75	0.83	10 & 10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	4	1	1.66	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	2.2	0.75	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	5	1	1.39	10	35.00	1.00	3.5	2.3	0.33	....	....	10

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†First 30 hours' use per kw-hr.

††Next 70 hours' use per kw-hr.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate: Number of kw-hrs. per month	First rate: Per kw-hr. per month	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
	$ c.	cents		cents	cents	$ c.	%
Caledonia	29.17	......	60	3.2	1.1	0.83	10
Campbellville	56.27	33-66	40	6	2	2.22	10
Cannington	38.57	33-66	55	3	1.5	1.11	10
Cardinal	29.44	33-66	50	2.5	1.25	1.11	10
Carleton Place T	29.37	......	55	3.5	1.3	0.83	10
Cayuga	46.69	33-66	45	4.5	2	1.66	10
Chatham C	29.71	......	60	3.3	1.1	0.83	10
Chatsworth	44.24	33-66	45	4	1.5	1.67	10
Chesley	33.86	......	55	3	1.5	1.11	10
Chesterville	34.33	33-66	55	3	1.5	0.83	10
Chippawa	24.46	33-66	60	2.5	1.25	1.11	10
Clifford	51.51	33-66	50	4.5	2	1.39	10
Clinton	35.07	33-66	60	2.5	1.5	1.11	10
Cobden	64.89	33-66	30	6	2	1.95	10
Cobourg T	32.23	......	55	3.7	1.2	0.83	10
Colborne	33.87	......	60	5	1.5	0.83	10
Coldwater	32.87	33-66	55	2.5	1	1.11	10
Collingwood	36.41	33-66	55	2.5	1	0.83	10
Comber	43.61	......	60	4.4	1.2	1.38	10
Cookstown	44.73	33-66	40	5.2	1.5	1.67	10
Cottam	41.48	......	60	4.5	1.2	1.66	10
Courtright	72.68	33-66	50	6	1.5	1.94	10
Creemore	49.79	33-66	45	4	1.2	1.66	10
Dashwood	43.90	33-66	45	4.5	1.3	1.11	10
Delaware	35.54	33-66	50	3.5	1.3	1.11	10
Deseronto	45.51	33-66	50	4.5	1.5	0.83	10
Dorchester	37.91	33-66	60	2.5	1.4	0.83	10
Drayton	51.89	33-66	55	3.5	1.5	1.11	10
Dresden	41.29	......	60	3.1	1.1	1.11	10
Drumbo	39.05	......	60	4.5	1.3	1.11	10
Dublin	57.17	33-66	60	6	2	1.67	10
Dundalk	34.40	33-66	55	3	1.3	1.11	10
Dundas T	25.49	33-66	60	2	1	0.83	10
Dunnville T	30.92	......	60	2.7	1	0.83	10
Durham	36.61	33-66	50	2.5	1.25	0.83	10
Dutton	35.20	......	60	2.7	1	0.83	10
East York	31.23	33-66	60	2.2	1.2	0.83	10
Elmira T	31.71		60	4.5	1.4	1.11	10
Elmvale	38.13	......	55	3.5	1.2	0.83	10
Elmwood	39.62	33-66	45	5	1.5	1.39	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

"E"—Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	2.2	0.75	0.83	10	25.00	1.00	2	1.3	0.33			10
5	6	1	2.22	10	45.00	1.00	4.9	3.3	0.33			10
5	3	1	1.11	10	35.00	1.00	3.5	2.3	0.33			10
5	2.5	1	1.11	10	36.00	1.00	3.7	2.4	0.33	Min. 3.33		10
5	2.8	1	0.83	10	22.00	1.00	1.9	1.3	0.33		10	10
5	4.5	1	1.66	10	40.00	1.00	4.3	2.8	0.33			10
5	2.5	0.8	0.83	10	23.00	1.00	2.1	1.4	0.33		10	10
5	4	1	1.67	10	38.00	1.00	4	2.6	0.33			10
5	2.5	1	1.11	10	25.00	1.00	2	1.3	0.33			10
5	3	1	0.83	10	28.00	1.00	2.5	1.6	0.33			10
5	2.5	0.75	1.11	10	27.00	1.00	2.3	1.5	0.33			10
5	4.5	1	1.39	10	50.00	1.00	5.7	3.8	0.33			10
5	2.5	1	1.11	10	33.00	1.00	3.2	2.1	0.33			10
5	6	2	2.78	10	50.00	1.00	5.7	3.8	0.33	Min. 2.78		10
5	3	1	0.83	10	22.00	1.00	1.9	1.3	0.33		10	10
5	4	1	0.83	10	35.00	1.00	3.5	2.3	0.33			10
5	2.5	1	1.11	10	28.00	1.00	2.5	1.6	0.33			10
5	2.5	1	0.83	10	20.00	1.00	1.6	1	0.33		10	10
5	3.6	1	1.38	10	33.00	1.00	3.2	2.1	0.33			10
5	5.2	1.5	1.67	10	38.00	1.00	4	2.6	0.33			10
5	3.7	1	1.66	10	40.00	1.00	4.3	2.8	0.33			10
7.5	6	1	1.94	10	55.00	1.00	6.5	4.3	0.33			10
5	4	1	1.66	10	35.00	1.00	3.5	2.3	0.33			10
5	4.5	1	1.11	10	45.00	1.00	4.9	3.3	0.33			10
5	3.5	1	1.11	10	35.00	1.00	3.5	2.3	0.33			10
5	4.5	1	0.83	10	30.00	1.00	2.8	1.8	0.33			10
5	2.5	1	0.83	10	32.00	1.00	3.1	2	0.33			10
5	3.5	0.75	1.11	10	38.00	1.00	4	2.6	0.33			10
5	2.3	0.75	1.11	10	31.00	1.00	2.9	1.9	0.33			10
5	3.4	1	1.11	10	38.00	1.00	4	2.6	0.33			10
5	6	1	1.67	10	45.00	1.00	4.9	3.3	0.33			10
5	3	1	1.11	10	28.00	1.00	2.5	1.6	0.33			10
5	2	0.6	0.83	10	19.00	1.00	2	1.4	0.33		25	10
5	2.2	0.75	0.83	10	19.00	1.00	2	1.4	0.33		25	10
5	2.5	1	0.83	10	24.00	1.00	2.3	1.5	0.33		10	10
5	2.2	0.6	0.83	10	23.00	1.00	2.1	1.4	0.33		10	10
5	2.2	0.6	0.83	10	21.00	1.00	1.8	1.1	0.33		10	10
5	3.4	1	1.11	10	25.00	1.00	2	1.3	0.33			10
5	2.5	1	0.83	10	30.00	1.00	2.8	1.8	0.33			10
5	5	1	1.39	10	35.00	1.00	3.5	2.3	0.33			10

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate		All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
			Number of kw-hrs. per month	Per kw-hr. per month			
	$ c.	cents		cents	cents	$ c.	%
Elora	34.97	33–66	55	3	1.5	1.11	10
Embro	40.72	.....	60	3.6	1.3	1.67	10
Erieau	48.30	33–66	45	4.5	1.3	1.67	10
Erie Beach	58.68	33–66	60	6	2	1.94	10
Essex	34.08	......	60	3.1	1.1	0.83	10
Etobicoke Twp.	26.97	33–66	60	2.3	1.3	0.83	10
Exeter	36.41	....	60	3.5	1.2	0.83	10
Fergus	32.47	33–66	55	3	1.5	1.11	10
Finch	45.53	33–66	40	3.2	1.5	1.66	10
Flesherton	41.98	....	55	4	1.5	1.11	10
Fonthill	32.22	33–66	55	3	1.5	1.38	10
Forest	44.65	....	60	3.8	1.2	1.11	10
Fort William C	21.94	....	60	2.5	1	0.83	10
Galt C	27.32	....	50 60	3.3	1	0.83	10
Gamebridge	....	33–66	45	5	1.5	1.67	10
Georgetown T	33.71	....	60	3.3	1.1	0.83	10
Glencoe	51.40	....	60	4.2	1.5	1.11	10
Glen Williams	....	33–66	60	3	1.5	0.83	10
Goderich T	39.02	33–66	55	3	1.5	0.83	10
Grand Valley	51.08	33–66	45	4.5	1.5	1.39	10
Granton	45.92	33–66	55	3	1.3	1.11	10
Gravenhurst	22.27	33–66	60	2	1	0.83	10
Guelph C	26.94	33–33	60	2	1	0.83	10 & 10
Hagersville	32.04	33–66	60	2	1	0.83	10
Hamilton C	24.28	....	60	3.1	1	0.83	10
Hanover T	30.02	33–66	55	2.5	1.5	0.83	10
Harriston	39.90	33–66	55	3.5	1.5	1.11	10
Harrow	35.74	......	60	3.6	1.3	0.83	10
Hastings	43.03	33–66	45	4.5	1.5	1.66	10
Havelock	47.58	33–66	50	4	1.5	0.83	10
Hensall	45.53	33–66	55	3.5	1.3	1.11	10
Hespeler T	27.54	....	60	3.5	1.3	0.83	10
Highgate	43.70	....	60	4	1.5	1.11	10
Holstein	71.36	33–66	40	6	2	1.67	10
Humberstone	27.66	....	60	3.2	1.1	0.83	10
Huntsville T	26.86	......	60	2.5	1	0.83	10
Ingersoll T	29.50	33–66	60	2	1.2	0.83	10
Jarvis	39.91	....	50	4.3	1.25	1.11	10
Kemptville	35.30	33–66	55	3	1.5	0.83	10
Kincardine T	47.61	33–66	40	4	1.7	1.11	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

"E"—Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	3	0.75	1.11	10	25.00	1.00	2	1.3	0.33	....	....	10
5	3.1	1	1.67	10	39.00	1.00	4.1	2.7	0.33	....	....	10
5	4.5	1	1.67	10	48.00	1.00	5.4	3.6	0.33	Min. 2.22	....	10
5	6	1.25	1.94	10	60.00	1.00	7.2	4.8	0.33	....	....	10
5	2.5	0.75	0.83	10	25.00	1.00	2	1.3	0.33	....	....	10
5	2.3	0.7	0.83	10	21.00	1.00	1.8	1.1	0.33	....	10	10
5	2.6	0.75	0.83	10	27.00	1.00	2.3	1.5	0.33	....	....	10
5	3	0.75	1.11	10	26.00	1.00	2.2	1.4	0.33	....	....	10
5	3.2	1	1.94	10	45.00	1.00	4.9	3.3	0.33	....	....	10
5	3.1	1	1.11	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	3	0.75	1.38	10	32.00	1.00	3.1	2	0.33	....	....	10
5	3.2	0.75	1.11	10	38.00	1.00	4	2.6	0.33	....	....	10
5	2.4	0.8	0.83	10	21.00	1.00	1.6	0.9	0.1	....	....	10
5	2.5	0.6	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10
5	5	1	1.67	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	2.2	0.6	0.83	10	21.00	1.00	1.8	1.1	0.33	....	10	10
5	3.5	1	1.11	10	45.00	1.00	4.9	3.3	0.33	....	....	10
5	3	0.75	0.83	10	36.00	1.00	3.7	2.4	0.33	....	....	10
5	3	0.75	0.83	10	31.00	1.00	2.9	1.9	0.33	....	....	10
5	4.5	1	1.39	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	3	1	1.11	10	32.00	1.00	3.1	2	0.33	....	....	10
5	2	1	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	2	0.35	0.83	10&10	15.00	1.00	1.3	0.8	0.33	....	25	10
5	2	0.75	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
....	†3.5 ††1.75	0.35	0.83	10	17.00	1.00	1.68	1.12	0.32	....	25	10
5	2.5	1	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	3.5	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	2.8	1	0.83	10	31.00	1.00	2.9	1.9	0.33	....	....	10
5	4.5	1	1.66	10	37.00	1.00	3.8	2.5	0.33	....	....	10
5	4	1	0.83	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	3.5	1	1.11	10	33.00	1.00	3.2	2.1	0.33	....	....	10
5	2.7	0.75	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
5	3.5	1	1.11	10	38.00	1.00	4	2.6	0.33	....	....	10
5	6	2	1.67	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	2.4	0.75	0.83	10	29.00	1.00	2.6	1.7	0.33	....	....	10
5	2	1	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10
5	2	0.6	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10
5	3.5	0.75	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	3	1	0.83	10	32.00	1.00	3.1	2	0.33	....	....	10
5	4	1	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10

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†First 30 hours per kw-hr.
††Next 70 hours per kw-hr.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate		All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
			Number of kw-hrs. per month	Per kw-hr. per month			
	$ c.	cents		cents	cents	$ c.	%
Kingston C	24.00-36.00	33-66	50	2	1	0.83	10 & 10
Kingsville T	36.14	....	60	3.4	1.1	0.83	10
Kirkfield	56.24	33-66	40	6	2	2.22	10
Kitchener C	26.72	....	60	2.8	1.1	0.83	10
Lakefield	38.18	33-66	50	3	2	0.83	10
Lambeth	40.98	....	60	3.6	1.4	1.11	10
Lanark	40.43	33-66	50	4	1.5	0.83	10
Lancaster	61.10	33-66	60	6	2	1.66	10
La Salle	34.79	....	60	4	1.5	1.11	10
Leamington T	35.79	....	60	3	1	0.83	10
Leaside	....	*3		**2	1.5	0.83	10
Lindsay T	35.27	....	60	3	1.5	0.83	10
Listowel T	34.60	33-66	60	2.5	1.25	0.83	10
London C	25.88	....	80	2.6	1	0.83	10
London Twp.	30.59	....	60	3.5	1	1.11	10
Long Branch	28.25	33-66	60	2.3	1.3	0.83	10
Lucan	35.42	33-66	55	3.2	1.3	1.11	10
Lucknow	51.48	33-66	45	4.2	1.5	1.67	10
Lynden	34.62	33-66	55	3.5	1.5	1.38	10
Madoc	42.28	33-66	50	3	1.5	0.83	10
Markdale	34.24	....	55	3.5	1.2	1.11	10
Markham	35.45	33-66	55	3.3	1.3	1.11	10
Marmora	42.08	....	60	5	1.5	1.11	10
Martintown	43.85	33-66	40	4.5	1.5	1.66	10
Maxville	49.79	33-66	55	6	2	1.66	10
Meaford T	39.13	33-66	60	2.5	1.2	0.83	10
Merlin	40.11	....	60	4.2	1.5	1.11	10
Merritton T	22.87	33-66	60	2	1	0.83	10
Midland T	29.52	33-66	60	2	1	0.83	10
Mildmay	43.41	....	40	4.5	1.2	1.39	10
Milton	32.99	33-66	55	3	1.5	0.83	10
Milverton	34.96	33-66	60	3	1.5	1.11	10
Mimico T	25.74	33-66	60	2.4	1.2	0.83	10
Mitchell	32.10	33-33	60	2.5	1.5	0.83	10
Moorefield	57.52	33-66	50	4.5	2	1.39	10
Mount Brydges	38.70	....	60	3.4	1.3	1.11	10
Mount Forest	38.87	33-66	60	2.25	1.25	0.83	10
Napanee T	31.08		50	4.3	1.5	0.83	10
Neustadt	59.06	33-66	60	6	2	1.67	10
Newbury	49.47	33-66	45	5	1.5	1.38	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

*Service charge per 100 sq. ft.

**Per kw-hr. for first 3 kw-hrs. per 100 sq. ft.

"E"—Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	2	0.75	0.83	10 & 10	18.00	1.00	1.9	1.2	0.33		25	10
5	2.5	0.75	0.83	10	31.00	1.00	2.9	1.9	0.33			10
5	6	1	2.22	10	40.00	1.00	4.3	2.8	0.33			10
5	2	0.75	0.83	10	19.00	1.00	2	1.4	0.33		25	10
5	3	1	0.83	10	24.00	1.00	2.3	1.5	0.33		10	10
5	3.3	1	1.11	10	34.00	1.00	3.4	2.2	0.33			10
5	4	1	0.83	10	45.00	1.00	4.9	3.3	0.33			10
5	6	1	2.22	10	69.00	1.00	8.6	5.7	0.33			10
5	3.5	1	1.11	10	33.00	1.00	3.2	2.1	0.33			10
5	2.3	0.75	0.83	10	25.00	1.00	2	1.3	0.33			10
	‡4 & 2	1	0.83	10	23.28	1.00	1.8	1.1	0.33			10
5	2.5	1	0.83	10	20.00	1.00	1.6	1	0.33		10	10
5	2.5	0.75	0.83	10	24.00	1.00	2.3	1.5	0.33		10	10
5	2	0.5	0.83	10	18.00	1.00	1.9	1.2	0.33		25	10
5	2.8	0.75	1.11	10	28.00	1.00	2.5	1.6	0.33			10
5	2.3	0.7	0.83	10	21.00	1.00	1.8	1.1	0.33		10	10
5	3.2	0.75	1.11	10	30.00	1.00	2.8	1.8	0.33			10
5	4.2	1	1.67	10	38.00	1.00	4	2.6	0.33			10
5	3.5	1.5	0.83	10	32.00	1.00	3.1	2	0.33			10
5	3	1	0.83	10	35.00	1.00	3.5	2.3	0.33			10
5	2.5	1	1.11	10	28.00	1.00	2.5	1.6	0.33			10
5	3.3	1	1.11	10	35.00	1.00	3.5	2.3	0.33			10
5	4.5	1	1.11	10	40.00	1.00	4.3	2.8	0.33			10
5	4.5	1	2.22	10	45.00	1.00	4.9	3.3	0.33			10
5	6	1	1.94	10	45.00	1.00	4.9	3.3	0.33			10
5	2.5	0.8	0.83	10	27.00	1.00	2.3	1.5	0.33			10
5	3.5	1	1.11	10	37.00	1.00	3.8	2.5	0.33	Min.2.22		10
5	2	0.75	0.83	10	18.00	1.00	1.9	1.2	0.33		25	10
5	2	1	0.83	10	17.00	1.00	1.7	1.1	0.33		25	10
5	3.5	1	1.39	10	38.00	1.00	4	2.6	0.33			10
5	3	0.75	0.83	10	24.00	1.00	2.3	1.5	0.33		10	10
5	3	1	1.11	10	26.00	1.00	2.2	1.4	0.33			10
5	2.4	0.6	0.83	10	24.00	1.00	2.3	1.5	0.33		10	10
5	2.5	0.75	0.83	10	26.00	1.00	2.2	1.4	0.33			10
5	4.5	1	1.39	10	45.00	1.00	4.9	3.3	0.33			10
5	2.8	0.75	1.11	10	34.00	1.00	3.4	2.2	0.33			10
5	2.25	1	0.83	10	30.00	1.00	2.8	1.8	0.33			10
5	3.3	0.75	0.83	10	22.00	1.00	1.9	1.3	0.33		10	10
5	6	1	1.67	10	40.00	1.00	4.3	2.8	0.33			10
5	5	1	1.38	10	51.00	1.00	5.9	3.9	0.33			10

‡First 70 hours' use 4 cents per kw-hr.
Next 70 hours' use 2 cents per kw-hr.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate: Number of kw-hrs. per month	First rate: Per kw-hr. per month	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
	$ c.	cents		cents	cents	$ c.	%
New Hamburg	32.18		60	3.8	1.4	0.83	10
New Toronto T	28.18	33-66	60	2	1.1	0.83	10
Niagara Falls C	21.33		60	3	1	0.83	10
Niagara-on-the-Lake	25.39	33-66	60	2.5	1.25	0.83 to 1.11	10
Nipigon Twp.	27.18		55	4.2	1	1.39	10
North York Twp.	31.10	33-66	55	3.5	1.5	1.11	10
Norwich	33.50	33-66	60	2.5	1.25	0.83	10
Norwood	37.20	33-66	50	4.5	1.5	1.11	10
Oil Springs	40.59		60	3.5	1.3	1.11	10
Omemee		33-66	60	4	1.5	1.11	10
Orangeville T	41.62		55	3.6	1.2	1.11	10
Oshawa C	31.63		50	4.5	1.2	0.83	10
Ottawa C	14.21	33-66	60 60	2 1	0.5	0.83	10
Otterville	40.99		60	3.4	1.2	1.11	10
Owen Sound C	29.49		60	2.5	1	0.83	10
Paisley	51.24	33-66	45	4.6	1.2	1.39	10
Palmerston	37.41	33-66	60	2.6	1.3	1.11	10
Paris T	27.64	33-66	60	2	1	0.83	10
Parkhill	55.14	33-66	60	4.5	2	1.38	10
Penetanguishene T	32.82	33-66	55	3	1.5	0.83	10
Perth T	28.91		55	3.3	1	0.83	10
Peterborough C	26.84		55	3	1.2	0.83	10
Petrolia T	36.97		60	3.2	1.1	0.83	10
Picton T	40.16		60	3.4	1.25	0.83	10
Plattsville	47.20	33-66	50	4.5	2	1.39	10
Point Edward	34.87		60	3.7	1.3	0.83	10
Port Arthur C	21.32		50	2	1	0.83	10 & 10
Port Colborne T	27.46	33-66	60	2.8	1.25	0.83	10
Port Credit	31.92	33-66	60	2.2	1.2	0.83	10
Port Dalhousie	27.90	33-66	60	2.2	1.2	0.83	10
Port Dover	35.48		50	3.3	1.1	0.83	10
Port Elgin	39.13	33-66	40	2.5	1.2	1.11	10
Port Hope T	33.61		60	3.5	1.2	0.83	10
Port McNicoll	34.27	33-66	50	3.5	1.5	0.83	10
Port Perry	42.89		50	4	1.2	1.11	10
Port Rowan	46.83	33-66	60	5	2	1.66	10
Port Stanley	36.14		60	3.5	1.2	0.83	10
Prescott T	26.40	33-66	60	2	1	0.83	10
Preston T	27.06		60	3.2	1	0.83	10
Priceville	52.99	33-66	60	6	2	1.67	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

"E"—Continued

Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	2.8	1	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2	0.6	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10
5	2	0.35	0.83	10	17.00	1.00	1.7	1.1	0.33	....	25	10
5	2.5	0.75	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	3	1	1.39	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	3.5	0.75	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	2.5	0.75	0.83	10	26.00	1.00	2.2	1.4	0.33	....	....	10
5	4.5	1	1.11	10	38.00	1.00	4	2.6	0.33	....	....	10
5	3.3	1	1.11	10	34.00	1.00	3.4	2.2	0.33	....	....	10
5	4	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	2.5	1	1.11	10	25.00	1.00	2	1.3	0.33	....	....	10
5	3.5	0.8	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
....	†5 ††2.2	0.5	0.83	10	20.00	1.00	1.8	1.2	0.15	....	15	10
5	3	0.75	1.11	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	2	1	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	4.6	1	1.39	10	45.00	1.00	4.9	3.3	0.33	....	....	10
5	2.6	1	1.11	10	25.00	1.00	2	1.3	0.33	....	....	10
5	2	0.75	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	4.5	1	1.38	10	48.00	1.00	5.4	3.6	0.33	....	....	10
5	3	1	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
5	2.3	1	0.83	10	19.00	1.00	2	1.4	0.33	....	25	10
5	2.5	1	0.83	10	19.00	1.00	2	1.4	0.33	....	25	10
5	2.4	0.75	0.83	10	29.00	1.00	2.6	1.7	0.33	....	....	10
5	2.5	1	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
5	4.5	1	1.39	10	45.00	1.00	4.9	3.3	0.33	....	....	10
5	2.8	0.75	0.83	10	26.00	1.00	2.2	1.4	0.33	....	....	10
5	2	0.3	0.83	10&10	21.00	1.00	1.6	0.9	0.1	....	....	10
5	2.8	0.75	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2.2	0.75	0.83	10	25.00	1.00	2	1.3	0.33	....	....	10
5	2.2	0.75	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10
5	2.5	1	0.83	10	27.00	1.00	2.3	1.5	0.33	....	....	10
5	2.5	0.8	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	3	1	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	3.5	1	0.83	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	3.2	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	5	2	1.66	10	45.00	1.00	4.9	3.3	0.33	....	....	10
5	2.8	0.75	0.83	10	35.00	1.00	3.5	2.3	0.33	Min. 1.11	....	10
5	2	1	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
5	2.5	0.75	0.83	10	19.00	1.00	2	1.4	0.33	....	25	10
5	6	1	1.67	10	40.00	1.00	4.3	2.8	0.33	....	....	10

†First 30 hours' use per kw-hr.
††Next 70 hours' use per kw-hr.

STATEMENT

Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate		All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
			Number of kw-hrs. per month	Per kw-hr. per month			
	$ c.	cents		cents	cents	$ c.	%
Princeton	42.90	33-66	50	3.5	1.5	1.66	10
Queenston	27.92	33-66	55	3	1.5	1.38	10
Richmond	52.20	33-66	35	6	2	1.95	10
Richmond Hill	33.01	33-66	60	2	1	0.83	10
Ridgetown	36.49	....	60	2.8	1	0.83	10
Ripley	67.89	33-66	55	6	1.5	1.67	10
Riverside T	33.09	....	55	4.2	1.5	0.83	10
Rockwood	40.40	33-66	60	2.7	1.25	1.11	10
Rodney	48.48	....	60	3.4	1.3	0.83	10
Rosseau	84.00	¶33	....	7	2	¶2.22	10
Russell	48.84	33-66	50	5.5	2	1.39	10
St. Catharines C	22.85	33-66	30-60	2	1	0.83	10
St. Clair Beach	39.00	....	55	5.2	1.75	1.66	10
St. George	36.02	33-66	55	3	1.25	1.11	10
St. Jacobs	31.29	33-66	60	3	1.5	1.11	10
St. Marys T	33.51	....	60	4.1	1.5	1.11	10
St. Thomas C	26.87	....	60	2.6	1	0.83	10
Sarnia C	31.82	....	60	3.4	1	0.83	10
Scarboro Twp.	29.80	....	60	3.1	1.2	0.83	10
Seaforth	33.30	33-66	60	2.5	1.25	0.83	10
Shelburne	39.71	....	50	4.2	1.4	1.11	10
Simcoe T	28.34	....	60	2.7	1	0.83	10
Smiths Falls T	25.69	....	55	3.5	1.25	0.83	10
Southampton	38.89	33-66	40	3	1.5	1.11	10
Springfield	47.35	33-66	55	3.5	1.5	1.11	10
Stamford Twp.	21.65	....	60	3.3	1.25	0.83	10
Stayner	36.25	33-66	55	2.5	1.25	0.83	10
Stirling	28.95	....	50	3	1.2	0.83	10
Stouffville	42.70	33-66	55	3	1.1	1.11	10
Stratford C	28.63	....	60	3.4	1.25	0.83	10
Strathroy T	30.99	....	60	3.1	1	0.83	10
Streetsville	35.66	33-66	50 50	4 2	1	0.83	10
Sunderland	51.13	33-66	45	4.5	1.2	1.39	10
Sutton	47.17	33-33	50	3.8	1.8	1.11	10
Tara	40.19	33-66	40	4	1.8	1.11	10
Tavistock	33.23	33-66	60	2.5	1.25	0.83	10
Tecumseh T	36.99	....	60	4.4	1.5	1.11	10
Teeswater	52.76	33-66	50	4.5	1.5	1.39	10
Thamesford	35.52	33-66	60	2.4	1	1.11	10
Thamesville	36.34	....	60	3	1.2	0.83	10
Thedford	62.27	33-66	50	5	2	1.66	10
Thorndale	60.41	33-66	60	4	2	1.38	10
Thornton	54.29	33-66	60	6	2	1.67	10
Thorold T	24.32	33-66	60	2	1	0.83	10
Tilbury	35.98	....	60	2.8	1	0.83	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

¶According to consumers' demand.

"E"—Continued
Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	3.5	1	1.66	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	3	1	1.38	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	6	1	2.22	10	60.00	1.00	7.2	4.8	0.33	....	....	10
5	2	0.6	0.83	10	25.00	1.00	2	1.3	0.33	....	....	10
5	2.1	0.7	0.83	10	21.00	1.00	1.8	1.1	0.33	....	10	10
5	6	1	1.67	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	3	0.8	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2.7	0.75	1.11	10	42.00	1.00	4.6	3	0.33	....	....	10
5	2.9	0.75	0.83	10	33.00	1.00	3.2	2.1	0.33	....	....	10
5	7	2	2.22	10	58.00	1.00	6.9	4.6	0.33	....	....	10
5	5	1	1.94	10	56.00	1.00	6.6	4.4	0.33	....	....	10
....	†3.5 ††1.75	0.35	0.83	10	17.00	1.00	1.67	1.13	0.16	....	25	10
5	5	1	1.66	10	40.00	1.00	4.3	2.8	0.33			10
5	3	0.75	1.11	10	32.00	1.00	3.1	2	0.33	....	....	10
5	3	1	1.11	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	3	1	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2	0.5	0.83	10	17.00	1.00	1.7	1.1	0.33	....	25	10
5	2.4	0.6	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	2.4	0.5	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
5	2.5	0.75	0.83	10	29.00	1.00	2.6	1.7	0.33	....	....	10
5	2.9	1	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2	0.75	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
5	2.5	1	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	3	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	3.5	1	1.11	10	42.00	1.00	4.6	3	0.33	....	....	10
5	2.25	0.6	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	2.5	1	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2.2	1	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	3	1	1.11	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	2.3	0.75	0.83	10	25.00	1.00	2	1.3	0.33	....	....	10
5	2.4	0.6	0.83	10	25.00	1.00	2	1.3	0.33	....	....	10
Same as domestic			....	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	4.5	1	1.39	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	3.8	1	1.11	10	48.00	1.00	5.4	3.6	0.33	....	....	10
5	4	1	1.11	10	45.00	1.00	4.9	3.3	0.33	....	....	10
5	2.5	0.75	0.83	10	25.00	1.00	2	1.3	0.33	....	....	10
5	3.4	0.8	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	4.5	1	1.39	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	2.4	0.7	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2.4	0.75	0.83	10	30.00	1.00	2.8	1.8	0.33	....	....	10
7.5	5	1	1.66	10	55.00	1.00	6.5	4.3	0.33	....	....	10
5	4	1	1.38	10	48.00	1.00	5.4	3.6	0.33	....	....	10
5	6	1	1.67	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	2	0.5	0.83	10	19.00	1.00	2	1.4	0.33	....	25	10
5	2	0.75	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10

†First 30 hours' use per kw-hr.
††Next 70 hours' use per kw-hr.

STATEMENT
Cost of Power to Municipalities and Rates to Consumers for for the Year 1936, in Urban Municipalities

Municipality C—City T—Town (pop. 2,000 or more)	Annual cost to the Commission on the works to serve electrical energy to municipality on a horse-power basis	Domestic service					
		Service charge per month	First rate		All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount
			Number of kw-hrs. per month	Per kw-hr. per month			
	$ c.	cents		cents	cents	$ c.	%
Tillsonburg.......T	31.81	....	60	2.8	1	0.83	10
Toronto.......C	25.95	*3	....	**2	1	0.83	10
Toronto Twp.......	30.78	33–66	55	2.6	1.3	1.11	10
Tottenham.......	78.25	33–66	35	6	2	1.67	10
Trafalgar twp., Area 1.	....	55	60	3.5	2	1.11	10
Trafalgar twp., Area 2.	....	44–66	55	3.5	2	1.38	10
Trenton.......T	24.81	....	50	3.5	1.2	0.83	10
Tweed.......	52.04	33–33	50	4.5	1.5	1.11	10
Uxbridge.......	44.39	....	50	4	1.5	1.11	10
Victoria Harbour.......	41.78	33–66	55	3	1.5	1.11	10
Walkerton.......T	31.43	....	50	3.7	1.2	1.11	10
Wallaceburg.......T	35.14	....	60	3.1	1	0.83	10
Wardsville.......	54.82	33–66	50	6	2	1.66	10
Warkworth.......	41.19	....	50	5	1.5	1.39	10
Waterdown.......	29.60	33–66	60	2.3	1.2	0.83	10
Waterford.......	30.13	33–66	60	2	1	0.83	10
Waterloo.......T	27.22	....	60	2.8	1.25	0.83	10
Watford.......	48.12	....	55	4	1.2	1.11	10
Waubaushene.......	34.34	....	55	3	1	0.83	10
Welland.......C	24.24	....	60	3.1	1.2	0.83	10
Wellesley.......	45.84	....	50	5	2	1.11	10
Wellington.......	37.87	33–66	50	2.5	1.25	0.83	10
West Lorne.......	40.35	....	60	3.2	1.1	0.83	10
Weston.......T	25.97	....	60	3	1	0.83	10
Westport.......	59.50	33–66	35	6	2	2.50	10
Wheatley.......	49.07	....	60	4.5	1.5	1.39	10
Whitby.......T	31.64	....	60	3	1	0.83	10
Wiarton.......	54.18	33–66	40	4.5	1.8	1.67	10
Williamsburg.......	28.53	33–66	60	2.3	1	1.11	10
Winchester.......	31.51	33–66	60	2.4	1.2	0.83	10
Windermere.......	53.50	¶33	....	8	2	¶2.22	10
Windsor.......C	28.93	....	60	3.6	1.2	0.83	10
Wingham.......	53.63	....	50	3.5	1.3	1.11	10
Woodbridge.......	31.40	33–66	55	2.8	1.3	0.83	10
Woodstock.......C	27.82	....	60	2.8	1	0.83	10
Woodville.......	50.52	....	50	4.5	1.2	1.11	10
Wyoming.......	50.30	....	60	4.5	1.2	1.38	10
York twp. (inc. Swansea and Forest Hill).......	....	33–66	60	2	1.3	0.83	10
Zurich.......	54.81	33–66	50	4.5	1.5	1.38	10

NOTE.—Domestic service charge—33 cents per month per service when the permanently installed appliance load is under 2,000 watts and 66 cents per month when over 2,000 watts.

*Service charge per 100 sq. ft.

**Per kw-hr. for first 3 kw-hrs. per 100 sq. ft.

¶According to consumers' demand.

"E"—Concluded
Domestic Service—Commercial Light Service—Power Service Served by The Hydro-Electric Power Commission

Commercial Light service					Power service							
Service charge per 100 watts min. 1,000 watts	First 100 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum gross monthly bill	Prompt payment discount	Basis of rate 130 hours' monthly use of demand	Service charge per h.p. per month	First 50 hrs. per month per kw-hr.	Second 50 hrs. per month per kw-hr.	All additional per kw-hr.	Minimum or maximum per h.p. per month	Local discount	Prompt payment discount
cents	cents	cents	$ c.	%	$ c.	$ c.	cents	cents	cents	$ c.	%	%
5	2	0.6	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
						a. D.C.	2.5	1.25	0.60	....	....	....
....	‡4 & 2	1	0.83	10	....	*b.* A.C.	1.5	0.75	0.33	....	....	10
5	2.6	0.7	1.11	10	23.00	1.00	2.1	1.4	0.33	....	10	10
10	6	1	1.67	10	45.00	1.00	4.9	3.3	0.33	....	....	10
....	†8 ††4	1	1.11	10	37.00	1.00	3.5	2.3	1	....	....	10
5	3.5	1.5	1.38	10	38.00	1.00	3.5	2.3	1.5	....	....	10
5	3	1	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
5	4.5	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	3.2	1	1.11	10	32.00	1.00	3.1	2	0.33	....	....	10
5	3	1	1.11	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	2.5	1	1.11	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	2.5	0.7	0.83	10	24.00	1.00	2.1	1.5	0.33	....	10	10
5	6	1	1.66	10	55.00	1.00	6.5	4.3	0.33	....	....	10
5	4	1	1.39	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	2.3	0.75	0.83	10	24.00	1.00	2.3	1.5	0.33	....	10	10
5	2	0.75	0.83	10	20.00	1.00	1.6	1	0.33	....	10	10
5	2.25	1	0.83	10	19.00	1.00	2	1.4	0.33	....	25	10
5	3.6	1	1.11	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	2	1	0.83	10	33.00	1.00	3.2	2.1	0.33	....	....	10
5	2.2	0.6	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	4	1	1.11	10	35.00	1.00	3.5	2.3	0.33	....	25	10
5	2.5	1	0.83	10	36.00	1.00	3.7	2.4	0.33	....	....	10
5	2.8	0.75	0.83	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	2	0.6	0.83	10	18.00	1.00	1.9	1.2	0.33	....	25	10
5	6	1	2.50	10	50.00	1.00	5.7	3.8	0.33	....	....	10
5	4	1	1.39	10	40.00	1.00	4.3	2.8	0.33	....	....	10
5	2.5	0.6	0.83	10	28.00	1.00	2.5	1.6	0.33	....	....	10
5	4.5	1	1.67	10	43.00	1.00	4.7	3.1	0.33	....	....	10
5	2.3	1	1.11	10	36.00	1.00	3.7	2.4	0.33	....	....	10
5	2.4	0.8	0.83	10	30.00	1.00	2.8	1.8	0.33	Min. 2.22	....	10
5	8	2	¶2.22	10	58.00	1.00	6.9	4.6	0.33	....	....	10
5	2.5	0.8	0.83	10	23.00	1.00	2.1	1.4	0.33	....	10	10
5	3	0.8	1.11	10	35.00	1.00	3.5	2.3	0.33	....	....	10
5	2.8	1.0	0.83	10	22.00	1.00	1.9	1.3	0.33	....	10	10
5	2	0.5	0.83	10	17.00	1.00	1.7	1.1	0.33	....	25	10
5	3.5	1	1.11	10	30.00	1.00	2.8	1.8	0.33	....	....	10
5	4	1	1.38	10	42.00	1.00	4.6	3	0.33	....	....	10
5	2	0.75	0.83	10	21.00	1.00	1.8	1.1	0.33	....	10	10
5	4.5	1	1.38	10	50.00	1.00	5.7	3.8	0.33	Min. 2.77	....	10

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†First 30 hours' use per kw-hr.

††Next 70 hours' use per kw-hr.

‡First 70 hours' use 4 cents per kw-hr.
Next 70 hours' use 2 cents per kw-hr.

a. D.C. Service charge $1.35 per h.p. for first 10 h.p. plus $1.00 per h.p. for additional h.p.

b. A.C. Service charge $1.25 per h.p. for first 10 h.p. plus $1.00 per h.p. for additional h.p.

APPENDIX I

ACTS

CHAPTER 49

An Act to validate certain Contracts entered into by The Hydro-Electric Power Commission of Ontario and certain Companies.

Assented to April 9th, 1936.

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. This Act may be cited as *The Power Contracts Validation Act, 1936.* Short title.

2. The contracts as hereinafter set forth are hereby confirmed and declared to be legal and valid, such contracts being as follows: Contracts confirmed.

(*a*) Between The Hydro-Electric Power Commission of Ontario, Maclaren-Quebec Power Company and The James Maclaren Company, Limited, one contract bearing date the 1st day of February, 1936, set out in Schedule "A" hereto;

(*b*) Between The Hydro-Electric Power Commission of Ontario, Gatineau Power Company and Gatineau Transmission Company, two contracts bearing date the 8th day of February, 1936, set out in Schedule "B" hereto.

3. This Act shall come into force on the day upon which it receives the Royal Assent. Commencement of Act.

SCHEDULE "A"

BETWEEN THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO
MACLAREN-QUEBEC POWER COMPANY

—AND—

THE JAMES MACLAREN COMPANY LIMITED

1. AGREEMENT, 1ST OF FEBRUARY, 1936.

1

This Indenture dated this First day of February, A.D. 1936.

BY AND BETWEEN:

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,
(hereinafter called the "Commission"),

MACLAREN-QUEBEC POWER COMPANY, a Quebec Corporation,
(hereinafter called the "Power Company"),

—and—

THE JAMES MACLAREN COMPANY, LIMITED, a Dominion Corporation,
(hereinafter called the "Transmission Company").

Whereas the Commission and the Transmission Company heretofore executed an Indenture dated 20th day of December, A.D. 1930, relating to the delivery by the Transmission Company to the Commission of electrical power or energy with a periodicity of Twenty-five (25) cycles per second upon terms set forth in said Indenture;

And whereas the said three parties executed another Indenture dated 14th January, 1931, supplementary to the said power contract of 20th December, 1930, by which the Transmission Company assigned the said power contract to the Power Company, and guaranteed performance thereof by the Power Company;

And whereas the Legislature of the Province of Ontario has declared the said Indentures to be illegal, void and unenforceable as against the Commission;

Now therefore this Indenture witnesseth that for the considerations hereinafter contained the parties hereby covenant, promise and agree as follows:

1. The Power Company covenants and agrees with the Commission and with the Transmission Company:

1. (*a*) To keep available for delivery and to deliver to the Transmission Company for transmission and delivery to the Commission, when and as required by the Commission, on the conditions herein contained, so long as this agreement shall continue in force, Forty Thousand (40,000) horsepower of electrical power and energy which shall be the "Contract Demand" under this agreement.

1. (*b*) To maintain in place sufficient equipment in proper and efficient operable condition so as to insure fulfilment at all times of the terms of this agreement:

2. The Transmission Company covenants and agrees with the Commission:

2. (*a*) To provide and maintain the presently existing Two Hundred and Forty Thousand (240,000) volt single circuit transmission line from the southern boundary of the Power Company's Masson plant to a point in Ontario ten (10) feet within the Interprovincial boundary where the same connects with the transmission line of the Commission. The transmission line of the Transmission Company shall include the existing spare conductor extending from the tower on the Quebec shore over the Ottawa River to a point in Ontario ten feet within the Interprovincial boundary:

2. (*b*) To receive from the Power Company and to transmit over its transmission line and to deliver to the Commission at said point within the Province of Ontario, the electrical power and energy covered by this agreement:

2. (*c*) To maintain the aforesaid transmission line in a proper and efficient manner and at least up to the present standard of the transmission line of the Commission used to further transmit such power and energy:

2. (*d*) To maintain a two wire telephone line between the Power Company's plants and the aforesaid point in Ontario, and to permit the free use of said communication system to the Power Company and to the Commission for the proper control and delivery of the power specified in this agreement:

3. The Commission covenants and agrees with the Power Company and with the Transmission Company:

3. (*a*) To make monthly payments to the Power Company at the rate of Twelve Dollars and Fifty Cents ($12.50) per annum per horsepower of Contract Demand determined as provided in Clause 1 (*a*); the said monthly payments under this paragraph being subject always to adjustment as in this agreement provided:

3. (*b*) To make all payments to be made by it under this agreement in lawful money of Canada at Toronto:

3. (*c*) To indemnify the Power Company and the Transmission Company against and reimburse them respectively for any and all taxes, fees and other charges which may at any time be levied, assessed or imposed by the Province of Ontario, or any Authority thereof or thereunder, including any municipality and school authority therein, in respect or by reason of (*a*) the ownership, operation, maintenance or use of the Ten feet of transmission line in Ontario contemplated by the provisions of Clause 2, or (*b*) the transmission, sale or delivery of power or energy under this Agreement, or (*c*) the gross or net income derived therefrom, or (*d*) the transaction of business involved in the performance of this agreement or the operation of the said part of the said transmission line, whether any such tax, fee or other charge is levied, assessed or imposed upon either the Power Company or the Transmission Company or the property of either of them;

3. (*d*) To make the said monthly payments to the Power Company on the 20th day of each calendar month for the accrual of the preceding calendar month, the Power Company to render the bill on or before the 10th; provided that if any bill remains unpaid on the 20th of the month in which it is so rendered, the Commission shall thenceforth be in arrears for said payment and all payments in arrears shall bear interest at the rate of Five per cent. (5%) per annum; provided further that if the Commission or the Power Company be entitled to any adjustment in respect of any payment, such adjustment shall be given effect to in the monthly payment falling due next after the determination thereof, and no portion of any monthly payment shall be postponed pending determination of any such adjustment, except if and to the extent that any decision or determination on such adjustment (even though under appeal) shall have held the Commission entitled to the adjustment:

3. (*e*) At all times to take and use the three-phase power in such manner that the current will be taken approximately equally from the three phases and in no case shall the difference in current between any two phases be greater than Five per cent. (5%); if at any time the difference be greater than Five per cent. (5%), the Commission, upon instructions from the Power Company, shall so adjust its load as to comply with these requirements:

3. (*f*) At all times to take and use the Contract Demand so as not to exceed the weekly takings as specified in Clause 4 (*a*):

3. (*g*) To give to the Power Company from time to time such information as it reasonably can regarding its expected requirements in kilowatt hours from the Power Company, particularly as to any probable reduction in such requirements for any prospective period of light load; the intent of the parties in this clause is, so far as is possible by reasonable co-operation, to provide for the most economical use of the storage waters on the Lievre River watershed:

4. (*a*) The Commission shall be entitled at all times to an amount of electrical energy which is equivalent to the delivery of the Contract Demand at a weekly load factor of Seventy per cent. (70%), that is to say, that during each week the Commission shall be entitled subject to the provisions of Clause 3 (*g*), to receive such electrical energy in respect of Contract Demand as it shall require but not in excess of Eighty-eight (88) kilowatt hours for each horsepower of the Contract Demand;

On Sundays and holidays the Commission, if so requested by the Power Company, shall take or be deemed to have taken not less than three kilowatt hours for each horsepower of Contract

Demand. On Saturdays the Commission, if so requested by the Power Company, shall take or be deemed to have taken not less than seven kilowatt hours for each horsepower of Contract Demand:

4. (*b*) The amount of electrical power or energy delivered by the Power Company at any time when the ratio of the kilowatts to the kilovolt amperes is less than eighty-five per cent. (85%) shall be deemed to be eighty-five per cent. (85%) of the kilovolt amperes:

4. (*c*) If during any twenty minute period the integrated takings of the Commission exceed the Contract Demand then until the Commission shall have adjusted its load and supply conditions so that the takings of power and energy hereunder will be limited to the Contract Demand, the Power Company, without liability for damages or diminution of the payments specified hereunder, may limit the deliveries of electrical power and energy to an amount not in excess of the Contract Demand and for such purpose may decrease either the voltage or the frequency, or both:

4. (*d*) The power and energy delivered hereunder shall be alternating three phase with a periodicity of approximately twenty-five cycles per second at a pressure between phase wires of approximately, but not exceeding two hundred and forty thousand (240,000) volts, at the point of delivery to the Commission by the Transmission Company, subject to a reduction of not over fifteen per cent. (15%) from the said voltage from time to time as the Commission may direct; and the equipment and the apparatus installed by the Power Company in its plants shall be suitable to obtain this condition, provided however, that nothing herein shall be construed as obligating the Power Company to operate its apparatus in excess of its rated capacity at normal voltage; the Power Company shall maintain the generator voltage within two per cent. (2%) of the generator voltage corresponding to the voltage directed by the Commission as aforesaid and shall maintain suitable equipment for such purpose:

4. (*e*) Whenever the Commission shall require, from time to time, the Power Company shall increase or decrease the voltage and frequency of its plant or plants, within safe operating limits of the then existing equipment of such plant or plants to the extent required by the Commission in order to ensure operation satisfactory to the Commission in parallel with other sources of supply. It is understood and agreed that in operation of plants in parallel the control of power factor and power delivery in any generating plant is to a large extent within the control of the operators in that plant and the Power Company agrees, so far as it can do so with its equipment installed, so to operate its plant as to maintain a power factor at its points of measurement to the Commission, and also the delivery of power, within the limits directed by the Commission from time to time, provided that by so doing it shall if and to the extent necessary be relieved from its obligations as to voltage and frequency regulation specified in Clause 4 (*d*):

4. (*f*) If the Commission shall take in any week more kilowatt hours than it is entitled under Clause 4 (*a*) to take in such week, and the Power Company shall not in advance of such excess taking have filed with the Commission a protest as hereinafter provided, then upon notification from the Power Company the Commission will adjust the matter by making a corresponding reduction in its takings in the next following week in which its requirements permit it to do so, and the Commission shall not be subject to any penalty for such excess taking, or for any delay in making good the same. A protest from the Power Company for the purpose of this clause must be based upon a prior excess taking by the Commission and may not cover a period beyond the six months next following such excess taking. After receipt of such protest and during the period covered thereby the Commission shall use its best efforts to limit its weekly taking to the number of kilowatt hours which it is entitled to take under Clause 4 (*a*), always provided that the Power Company, so far as practicable, regulates the rate of delivery of power and kilowatt hours from time to time as the Commission may direct:

4. (*g*) For all purposes of this agreement the Power Company shall be considered to have held available for the Commission in each week all the horsepower and kilowatt hours to which the Commission was entitled in that week unless the Power Company fails to have available the power and energy which the Commission asks for, being entitled to the same under the provisions hereof, and unless within fourteen (14) days after the end of that week the Commission shall have given to the Power Company written notice of the fact and approximate amount of the deficiency:

4. (*h*) Because of the fact that the high voltage circuits mentioned in this agreement are physically connected and operated in parallel with those from other power sources, and because of the magnitude and nature of the system involved, it is necessary that the parties hereto co-operate. The parties hereto shall co-operate in respect of all matters of common interest including plant and equipment design, provided that each of the parties shall have the final decision and be responsible for its respective plant and properties. The parties hereto shall also co-operate in respect of design of control, protective, communication and other such features as necessitate a similar or co-ordinated equipment at the plants of each party. The parties hereto shall from time to time make such commercially reasonable changes in, or additions to the equipment owned by them respectively (other than major equipment) as will best serve the system as a

whole. Neither the Power Company nor the Transmission Company shall be obligated to instal, apparatus for a maximum voltage higher than that available from apparatus which the manufacturers are willing to build and recommend for use on a two hundred and forty thousand (240,000) volt system and in connection with standard two hundred and forty thousand (240,000) volt switching and auxiliary equipment or higher than the Commission provides for in its portion of the two hundred and forty thousand (240,000) volt system. The parties hereto shall exercise all due skill and diligence so as to secure the satisfactory operation as a system of the plant, apparatus and property of the several parties hereto:

The Power Company and the Transmission Company, or either of them, shall if requested by the Commission, replace, rebuild or improve circuit breakers, relays and other apparatus belonging to them respectively for the purpose of enabling the Commission to transmit more power over its own line or for the purpose of improving the operation of its own system; the Commission shall reimburse the Power Company and the Transmission Company for all necessary and reasonable expenditures made by them respectively to effect such replacement, rebuilding or improvement requested by the Commission for any of the purposes aforesaid:

5. (*a*) The measurement of electrical power and energy under this agreement shall be made by means of suitable polyphase recording demand meters and integrating kilowatt-hour meters provided and installed by the Power Company and the said meters shall be arranged so as to measure and record accurately the said power and energy. Readings from the said kilowatt-hour meters shall be taken daily at the same hour and recorded by the Power Company on forms supplied by the Commission. Records from the said kilowatt-hour meters and the said recording demand meters shall be dated and forwarded promptly by the Power Company to the Commission and such records on file with the Commission shall be available to the Power Company for inspection at all reasonable times:

5. (*b*) The weekly taking of energy shall be determined from the weekly readings of the said kilowatt-hour meters. The power delivered under this agreement shall be that recorded by the above mentioned polyphase recording demand meters and shall be the greatest integrated demand for any twenty (20) consecutive minutes as determined from coincident readings of the meters used in the measurement of this power, provided that nothing in this clause shall be construed as increasing any obligation of the Power Company under Clause 1, or increasing any obligation of the Commission under Clause 3:

5. (*c*) The power and energy supplied under this agreement shall be measured at the two hundred and forty thousand (240,000) volt step up transformers at or near the Power Company's Masson generating station and on the generator voltage side thereof and no adjustment of such measurement shall be required, the loss in single step transformation from generator to transmission voltage (approximately two hundred and forty thousand (240,000) volts as above) and transmission at this voltage from the transforming station or stations to the point of delivery having already been considered in the price herein specified:

5. (*d*) Access to said instruments and transformers belonging to the Power Company shall be free to the Commission at any and all times and the Commission may test such measuring instruments and transformers at any reasonable time, by giving to the Power Company seven (7) days' previous notice in writing, of its desire to test such measuring instruments and the Power Company shall be entitled go have a representative present while such test is being made:

5. (*e*) Measuring instruments with the necessary current and potential transformers for the measurement of electrical power and energy hereunder shall be provided, installed and maintained by the Power Company;

The Power Company agrees to test each meter installed by it to measure the electrical power and energy contracted for hereunder, at least once in each sixty (60) days. The Commission shall be advised at least five (5) days before the day of the test so it may if it so desires have a representative present to witness and verify such test; If at any time the Commission notifies the Power Company that it believes that such meters or any of them are not within the closest practicable approximation to perfect accuracy, said meter or meters shall be jointly tested within five (5) days of the receipt by the Power Company of the said notice; If any meter shall be found, on regular or special test, to be inaccurate, it shall be properly adjusted and the record of its readings taken since the last prior test and all bills affected shall be corrected; The Power Company shall repair or replace and retest defective meters or measuring equipment within a reasonable time; During any time there is no meter in service it shall be assumed that the power and energy taken is the same as for other days of the same month on which a similar load existed:

5. (*f*) The Commission may from time to time at its option install duplicate measuring equipment including necessary current and potential transformers at the points of measurement for the purpose of checking the records obtained from the Power Company's measuring equipment or for any other purpose:

5. (*g*) The Power Company shall be responsible for any damages to property or apparatus furnished by the Commission for the purpose of supplying or measuring power hereunder and installed on the Power Company's property, providing such damage originates from a source external to the said apparatus of the Commission and is not due to defects in the apparatus of the Commission:

5. (*h*) The kilowatts, kilovolt amperes, kilowatt hours, or any other factor or quantities shall be determined directly or indirectly from the measuring equipment provided for in this Clause 5, and the electrical standards of the University of Toronto, or of the recognized National authority, if there be such generally accepted, shall be used as the final reference as to the accuracy of measuring equipment:

6. Subject to the direction of the Commission, as provided in Clause 4, the maintenance by the Power Company and the Transmission Company of approximately the agreed voltage, at approximately the agreed frequency at the point of delivery to the Commission, together with the ability and readiness of the said Companies to meet the requirements of the Commission under this Agreement, shall constitute the delivery of power and energy involved in this Agreement, provided, however, that the provision in Clause 4 (*d*) as to 2% regulation of voltage shall apply only at the points of generation:

7. (*a*) In case the Power Company or the Transmission Company shall, at any time or times, be prevented from delivering, or the Commission from receiving the said power, or any part thereof, by strike, lockout, riot, fire, invasion, explosion, act of God, the King's enemies, or any other similar cause or causes reasonably beyond the control of them or any of them, then to the extent of such prevention, the Power Company and the Transmission Company shall not be bound to deliver such power during such time and the amount of the Contract Demand shall be deemed to be reduced for the purpose of computing the amount of power for which the Commission shall be obligated to pay during the period of such prevention by the amount of power which the Power Company or Transmission Company is prevented from delivering or the Commission is prevented from receiving as the case may be:

Each party shall be prompt and diligent in removing the cause of such interruption (and to this end shall in advance of any such interruption provide a reasonable reserve of spare parts and apparatus), and as soon as the cause of such interruption is removed, the Power Company and the Transmission Company shall without any delay, deliver said power as aforesaid and the Commission shall pay for the same;

7. (*b*) The Power Company and the Transmission Company respectively shall have the right at reasonable times and when possible after due notice has been given to the Commission to discontinue or reduce to the extent necessary the supply of power to the Commission for the purpose of safeguarding life or property, or for the purpose of making repairs, renewals or replacements to the generating, transforming, or transmitting equipment, but all such interruptions, total or partial, shall be of minimum duration, and when possible arranged for at a time least objectionable to the Commission;

During such interruptions, the Commission shall be released from its obligation to pay for such power as the Commission is entitled to receive and the Power Company or the Transmission Company fails to deliver:

8. One or more representatives or engineers of the Commission designated for this purpose, may, at any reasonable time, during the continuance of this Agreement, have access to the premises of the Power Company and of the Transmission Company for the purpose of inspecting the premises, apparatus, plants, property and electrical and hydraulic records of the said Companies and to take and obtain records therefrom as required: Representatives of the Power Company shall have similar rights in respect of the premises, apparatus, plants, property and electrical and hydraulic records of the Commission pertaining to the operation of this Agreement:

9. The Commission may waive any default under this Agreement but such waiver shall be limited to the particular instance and shall not affect the Commission's rights under this Agreement:

10. In case of the failure of the Power Company or of the Transmission Company in any week to deliver the full amount of electrical energy to which the Commission is entitled under Clause 4 (*a*) in such week, there shall be a proportionate reduction in the sums payable by the Commission to the Power Company in respect of the Contract Demand for such week; that is, the amount accrued due from the Commission to the Power Company in respect of the Contract Demand during such week shall be reduced by a sum having the same ratio to such accrued amount as the number of kilowatt hours which the Power Company or the Transmission Company fails to deliver as aforesaid bears to eighty-eight (88) times the horsepower of the then Contract Demand; Provided that in respect of any one week the Commission shall be entitled to only one reduction in the amount owing for such week, such reduction being either in respect of energy as provided in this Clause 10 or in respect of power as provided in Clauses 7 (*a*) and

7 (*b*) whichever reduction shall be greater; and in addition if such failure of the Power Company or Transmission Company is due to causes within its control (deficiency of stream flow or any of the matters in Clause 7 (*a*) shall not for the purposes of this clause be deemed to be within the control of the said Companies nor shall interruptions within Clause 7 (*b*), but financial difficulties and the supply of power or energy to the Transmission Company for any purpose other than the purposes of this Agreement or to any other consumer under contract with the Power Company or the Transmission Company are to be considered within the control of the said Companies), the Power Company shall pay to the Commission, as liquidated damages, a sum equal until October 1st, 1943, to fifty per cent. (50%) of the reduction so made in the sums payable by the Commission to the Power Company, thereafter to one hundred per cent. (100%):

11. The Commission shall be entitled at the termination of this Agreement, or within Thirty days thereafter, to remove from the premises of either of said Companies any and all plant or equipment which may have been installed by the Commission for the supply or measurement of power or energy hereunder:

12. All written notices to be delivered hereunder by any party to any other may be sent by prepaid registered letter to such address or addresses as each party shall from time to time file with the others. The parties agree each to maintain its address on file with the others and in default such address shall in the case of the Power Company and the Transmission Company, be deemed to be the Town of Buckingham, Province of Quebec, and in the case of the Commission the City of Toronto.

13. The electrical power and energy to be kept available for delivery to the Commission and to be delivered the Commission under this Agreement shall be electrical power and energy derived or developed from the water power at Masson and High Falls on the Lievre River which the Power Company represents that it owns in fee simple and this Agreement is made subject only to the conditions as to export of power to the United States lawfully attached by the Government of the Province of Quebec to its approval of the plans and specifications of the works at Masson and High Falls aforesaid:

14. This Agreement shall be binding on the parties hereto upon its execution and shall take effect as of February 1st, 1936, and shall continue in effect until cancelled by written notice delivered by the Power Company to the Commission or by the Commission to the Power Company not less than two (2) full years prior to the termination date therein specified, which termination date shall be January 31st of a year not earlier than 1946:

15. The Power Company and the Commission hereby respectively vest in the Transmission Company all right, title and interest of each of them respectively (if any) in the transmission line of the Transmission Company extending from the point where the Power Company's line connects therewith to the point ten (10) feet on the Ontario side of the boundary between the Provinces of Ontario and Quebec where the said transmission line of the Transmission Company connects with the transmission line of the Commission, including in the case of the Power Company all servitudes, lands and rights and interest therein used for the purposes of the said line of the Transmission Company and in the case of the Commission all rights in the nature of an easement or license necessary to the operation, repair and maintenance of the said line and other necessary incidental rights:

16. This contract shall be construed according to the laws of the Province of Ontario:

17. The Power Company hereby guarantees the due performance by the Transmission Company of all the obligations assumed by the latter Company hereunder:

18. In the event that any Mortgagee, Trustee, Receiver or Liquidator of either the Power Company or the Transmission Company or of any of the property of either of them shall at any time while this agreement is in force take any proceeding or do any act either in Court or out of Court to enforce any security upon any of the property, assets, rights or undertaking of either of said Companies or to disturb or interrupt the possession, use, and enjoyment by the said Companies respectively of any of the said property, assets, rights or undertaking the Commission may, unless such proceeding shall be discontinued, at its option declare this agreement to be determined, and the Commission shall not be deemed to have waived any such option by any postponement of or delay in its election nor otherwise than by an express waiver thereof in writing given by resolution of the Commission:

19. The Power Company and the Transmission Company respectively will promptly pay and discharge as and when due all taxes, license fees, rents and other sums of money in respect of the lands and properties, rights and easements used and employed by them respectively for or in connection with the generation and transmission of electrical power or energy for the purposes of this agreement, and they will respectively at all times observe keep and perform the terms and conditions of all leases, licenses, permits and agreements under which any of said properties, rights, or easements are held or enjoyed by them respectively, and in the even of default the Commission may at the expense of the Power Company make good such default and may reimburse itself for any moneys paid or cost or expense incurred by deducting the amount thereof

from the monthly sums to be paid by the Commission to the Power Company in respect of the delivery of power or energy under this Agreement:

In witness whereof the Parties hereto have caused this Agreement to be executed under their corporate seals, attested by the signatures of their proper officers duly authorized thereto.

WITNESS:

(Sgd.) JOHN T. BLACK
(Sgd.) J. H. COPPING

MACLAREN-QUEBEC POWER COMPANY,
(Seal)
(Sgd.) ALBERT MACLAREN,
President.
(Sgd.) J. A. BRYANT,
Secretary.

(Sgd.) JOHN T. BLACK
(Sgd.) J. H. COPPING

THE JAMES MACLAREN COMPANY, LIMITED,
(Seal)
(Sgd.) ALEXANDER MACLAREN,
Vice-President.
(Sgd.) J. A. BRYANT.
Secretary.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.
(Seal)
(Sgd.) T. S. LYON,
Chairman.
(Sgd.) A. MURRAY MCCRIMMON,
Secretary and Controller.

SCHEDULE "B"

BETWEEN THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,
GATINEAU POWER COMPANY
—AND—
GATINEAU TRANSMISSION COMPANY

1. AGREEMENT, 8TH OF FEBRUARY, 1936.
2. AGREEMENT, 8TH OF FEBRUARY, 1936.

1.

This Indenture dated this 8th day of February, A.D. 1936.

BY AND BETWEEN:

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,
(hereinafter called the "Commission"),

GATINEAU POWER COMPANY, a Quebec Corporation,
(hereinafter called the "Power Company")

—and—

GATINEAU TRANSMISSION COMPANY, a Dominion Corporation
(hereinafter called the "Transmission Company")

Whereas the Commission and the Power Company heretofore executed an Indenture dated 19th day of May, 1926, relating to the delivery by the Power Company to the Commission of electrical power or energy with a periodicity of twenty-five (25) cycles per second upon terms set forth in said Indenture;

And whereas the said parties executed five other Indentures supplementary to the first mentioned Indenture;

And whereas the Legislature of the Province of Ontario has declared the said Indentures to be illegal, void and unenforceable as against the Commission;

Now therefore this Indenture witnesseth that for the considerations hereinafter contained the Parties hereby covenant, promise and agree as follows:

1. The Power Company covenants and agrees with the Commission and with the Transmission Company:

(*a*) To keep available for delivery to the Transmission Company for transmission and delivery to the Commission so long as this agreement shall continue in force, two hundred and sixty thousand (260,000) horsepower of electrical power and energy on the conditions herein contained;

1. (*b*) To deliver to the Transmission Company for transmission and delivery to the Commission when and as ordered by the Commission, so long as this agreement shall continue in force, the Contract Demand, as hereinafter defined, of power and energy on the conditions herein contained:

1. (*c*) To deliver to the Transmission Company for transmission and delivery to the Commission in excess of the Contract Demand, immediately upon notice when and as ordered by the Commission for any of the purposes specified in Clause 4 (*f*), the Immediate Standby, as hereinafter defined, of power on the conditions herein contained:

1. (*d*) To deliver to the Transmission Company for transmission and delivery to the Commission, upon one week's notice when and as ordered by the Commission, as an addition to the Contract Demand all or any part of the General Reserve, as hereinafter defined, of power and energy on the conditions herein contained:

1. (*e*) To maintain in place sufficient equipment in proper and efficient operable condition so as to insure fulfilment at all times of the terms of this agreement:

1. (*f*) After the Contract Demand shall have reached two hundred and sixty thousand (260,000) horsepower, to deliver to the Transmission Company for transmission and delivery to the Commission whenever required by the Commission, electrical power up to the maximum available overload and spare capacity specified in Clause 4 (*h*):

1. (*g*) To use its best efforts to have maintained the existing storage capacity on the Gatineau River and to use its best efforts to have the storage on the said river administered and controlled to the best advantage with a view to the delivery of power and energy in accordance with the provisions of this agreement; and for the purposes aforesaid, duly to make all payments and do all things fully to perform and discharge the Power Company's obligations under its agreements with the Minister of Lands and Forests of the Province of Quebec, relating to the provision maintenance and administration of the said storage; to deliver the full Contract Demand and all the energy required under this agreement at all times when the average weekly stream flow at Chelsea would be at least equal to a normal minimum of ten thousand six hundred (10,600) cubic feet per second as determined by the Quebec Streams Commission with a capacity of one hundred and forty billion (140,000,000,000) cubic feet of storage; at all times when with storage capacity provided to the amount of one hundred and forty billion (140,000,000,000) cubic feet the river would not have provided an average weekly stream flow at Chelsea of ten thousand six hundred (10,600) cubic feet per second, the amount of electrical energy to which the Commission is entitled hereunder shall, during the period of such deficiency, be reduced by the same percentage by which the average weekly stream flow available with storage capacity to the amount of one hundred and forty billion (140,000,000,000) cubic feet would have fallen below the said average weekly rate of ten thousand six hundred (10,600) cubic feet per second:

Provided that the storage mentioned in this subclause shall be the same and shall not be in addition to the storage mentioned in the contract between the Company, the Transmission Company and the Commission of even date herewith covering the delivery of sixty (60) cycle power:

1. (*h*) That the Transmission Company will fulfill its obligations to the Commission under this agreement:

2. The Transmission Company covenants and agrees with the Commission:

(*a*) To provide and maintain the two presently existing 220,000 volt single circuit lines from the Power Company's generating plant to a point in Ontario ten (10) feet within the Inter-Provincial boundary where the same connect with the transmission lines of the Commission:

2. (*b*) To receive from the Power Company and to transmit over its transmission lines and to deliver to the Commission at said point within the Province of Ontario the electrical power and energy covered by this agreement:

2. (*c*) To maintain the aforesaid transmission lines in a proper and efficient manner and at least up to the present standard of the transmission lines of the Commission used to further transmit such power and energy:

2. (*d*) To maintain a two wire telephone line between the Power Company's plants and the aforesaid point in Ontario and to permit the free use of said communication system to the Power Company and to the Commission for the proper control and delivery of the power specified in this agreement:

3. The Commission covenants and agrees with the Power Company and with the Transmission Company:

(*a*) To make monthly payments to the Power Company at the rate of twelve dollars and fifty cents ($12.50) per annum per horsepower of Contract Demand, determined as provided in Clause 4 (*a*); the said monthly payments under this paragraph being subject always to adjustment as in this Agreement provided:

3. (*b*) To make monthly payments to the Power Company at the rate of ten dollars ($10.00) per annum per horsepower of the Immediate Standby, determined as provided in Clause 4 (*b*):

3. (*c*) To make monthly payments to the Power Company at the rate of one dollar and seventy-five cents ($1.75) per annum per horsepower of the General Reserve, determined as provided in Clause 4 (*c*);

3. (*d*) To make all payments to be made by it under this agreement in lawful money of Canada at Toronto;

3. (*e*) To indemnify the Power Company and the Transmission Company against and reimburse them respectively for any and all taxes, fees and other charges which may at any time be levied, assessed or imposed by the Province of Ontario or any Authority thereof or thereunder, including any municipality and school authority therein, in respect or by reason of (*a*) the ownership, operation, maintenance or use of the ten feet of transmission lines in Ontario contemplated by the provisions of Clause 2, or (*b*) the transmission, sale or delivery of power or energy under this Agreement, or (*c*) the gross or net income derived therefrom, or (*d*) the transaction of business involved in the performance of this Agreement or the operation of the said part of the said transmission lines, whether any such tax, fee or other charge is levied, assessed or imposed upon either the Power Company or the Transmission Company or the property of either of them;

3. (*f*) To make the said monthly payments to the Power Company on the 20th day of each calendar month for the accrual of the preceding calendar month, the Power Company to render the bill on or before the 10th; provided that if any bill remains unpaid on the 20th of the month in which it is so rendered, the Commission shall thenceforth be in arrears for said payment and all payments in arrears shall bear interest at the rate of five per cent. (5%) per annum; provided further that if the Commission or the Power Company be entitled to any adjustment in respect of any payment, such adjustment shall be given effect to in the monthly payment falling due next after the determination thereof, and no portion of any monthly payment shall be postponed pending determination of any such adjustment, except if and to the extent that any decision or determination on such adjustment (even though under appeal) shall have held the Commission entitled to the adjustment;

3. (*g*) At all times to take and use the three-phase power in such manner that the current will be taken approximately equally from the three phases and in no case shall the difference in current between any two phases be greater than five per cent. (5%); if at any time the difference be greater than five per cent. (5%), the Commission, upon instructions from the Power Company, shall so adjust its load as to comply with these requirements;

3. (*h*) At all times to take and use the Contract Demand and the Immediate Standby so as not to exceed the weekly takings as specified in Clause 4 (*d*);

3. (*i*) To give to the Power Company from time to time such information as it reasonably can regarding its expected requirements in kilowatt hours from the Power Company, particularly as to any probable reduction in such requirements for any prospective period of light load; the intent of the parties in this clause is, so far as is possible by reasonable co-operation, to provide for the most ecomical use of the storage waters on the Gatineau watershed;

3. (*j*) Until the Contract Demand shall have reached two hundred and sixty thousand (260,000) horsepower, to purchase from the Power Company all power and energy generated in the Province of Quebec and used by the Commission in its Niagara System as now constituted (including frequency changers to serve other systems) except forty thousand (40,000) horsepower from the MacLaren-Quebec Power Company, or its successor, and such power as the Commission may take from the portion of the Chats Falls development located in the Province of Quebec;

4. (*a*) "Contract Demand" for the purposes of this agreement shall be defined as follows:

For each month up to and including April, 1936, the Contract Demand shall be the greatest amount of electrical power, not less than two hundred and one thousand (201,000) horsepower nor more than two hundred and sixty thousand (260,000) horsepower, ordered in writing by the Commission as the Contract Demand for that month;

For each month after April, 1936, the Contract Demand shall be the greatest amount of electrical power, not less than one hundred thousand (100,000) horsepower, nor more than two hundred and sixty thousand (260,000) horsepower, which shall then have been ordered in writing by the Commission as the Contract Demand at any time subsequent to the month of April, 1936;

The Contract Demand shall not be increased except upon an order in writing by the Commission;

All increases in the Contract Demand shall decrease the General Reserve, hereinafter defined, by a corresponding amount until such General Reserve shall have been reduced to zero, and thereafter shall decrease the Immediate Standby, as hereinafter defined, by a corresponding amount until such Immediate Standby shall also have been reduced to zero. Thereafter the Contract Demand shall be two hundred and sixty thousand (260,000) horsepower:

4. (*b*) "Immediate Standby" for the purpose of this agreement shall be thirty-three thousand (33,000) horsepower of electrical power until the Contract Demand shall have reached two hundred and twenty-seven thousand (227,000) horsepower, and thereafter shall be the excess, if any, of two hundred and sixty thousand (260,000) horsepower over the Contract Demand:

4. (*c*) "General Reserve" for the purposes of this agreement shall be the balance, if any, of the two hundred and sixty thousand (260,000) horsepower of electrical power remaining after deducting the sum of the Contract Demand and the Immediate Standby:

4. (*d*) The Commission shall be entitled at all times, whether or not it is availing itself of its rights to draw upon the Immediate Standby, to an amount of electrical energy which is equivalent to the delivery of the Contract Demand at a weekly load factor of Seventy (70) per cent., that is to say, that during each week the Commission shall be entitled, subject to the provisions of Clause 3 (*i*), to receive such electrical energy in respect of Contract Demand and Immediate Standby combined as it shall require but not in excess of eighty-eight (88) kilowatt-hours for each horsepower of the then Contract Demand:

On Sundays and holidays the Commission, if so requested by the Power Company, shall take or be deemed to have taken not less than three kilowatt-hours for each horsepower of Contract Demand. On Saturdays the Commission, if so requested by the Power Company, shall take or be deemed to have taken not less than seven kilowatt-hours for each horsepower of Contract Demand:

4. (*e*) The amount of electrical power or energy delivered by the Power Company at any time when the ratio of the kilowatts to the kilovolt-amperes is less than eighty-five per cent. (85%) shall be deemed to be eighty-five per cent. (85%) of the kilovolt amperes;

4. (*f*) In order to avoid or reduce the necessity of the Commission cutting off its load in the event of temporary accidental interruptions of its supply of such short duration as not to justify an increase of its generating capacity or of the Contract Demand hereunder, the Commission may draw upon the Immediate Standby as herein provided;

The Commission shall be entitled, under the provisions of this Clause 4 (*f*), without increasing thereby the Contract Demand, to delivery of such Immediate Standby power as may be necessary, after use of its own available spare capacity, to replace any contracted supply unavailable for the time being due to any one or more of the causes below mentioned or any part of the product of its own plant, apparatus or equipment temporarily out of service due to accident to equipment or apparatus or to wear and tear or the need for repair or to abnormal ice conditions, or operating at reduced capacity due to one or more of these causes, but not so as to increase thereby, by the addition of Immediate Standby power, the power and energy available from the Commission's plant and equipment and contracted supply as it would have been but for such causes; The Commission shall take all reasonable steps to remove or correct such causes as soon as possible; No such delivery of Immediate Standby power will be used to provide for increased load in the Commission's system by reason of bona fide increase in demand by the Commission's customers; No plant, apparatus or equipment shall be voluntarily taken out of service for purposes of repair in the months of November, December and January unless in case of absolute emergency;

The order of the Commission, provided for in Clause 1 (*c*) shall state the amount of the Immediate Standby which it requires and the purposes and estimated period for which its use is required;

4. (*g*) If during any twenty minute period the integrated takings of the Commission exceed the then Contract Demand plus such amount, if any, of the Immediate Standby as the Commission then is taking pursuant to the provisions of Clause 4 (*f*), then until the Commission shall have adjusted its load and supply conditions so that the takings of power and energy hereunder will be limited to the then Contract Demand plus such amount, if any, of the Immediate Standby as it then is so taking, the Power Company, without liability for damages or diminution of the payments specified hereunder, may limit the deliveries of electrical power and energy to an

amount not in excess of the then Contract Demand plus such amount, if any, of the Immediate Standby as the Commission then is so taking, and for such purpose decreases either the voltage or the frequency, or both, or may cut off any part or all of the power and energy being supplied to the Commission hereunder; If telephone connection through the normal facilities between the Power Company's switching station at Hull and the Commission's station at Leaside can at the time be made, the Power Company shall not, however, so cut off any part or all of the power and energy being supplied to the Commission hereunder until after it has used its best efforts to give fifteen minutes' notice by such telephone connection to an employee of the Commission at said Leaside station;

4. (*h*) After the Contract Demand shall have reached two hundred and sixty thousand (260,000) horsepower, the Commission may at any time, but at all times so as not to exceed the weekly takings of energy as specified in Clause 4 (*d*), increase the rate of taking of power to an amount in excess of the Contract Demand, up to the limits of the overload capacity of all the equipment used from time to time by the Power Company exclusively to meet its obligations hereunder, and of all the unused and available capacity of the remaining 25 cycle equipment of the Power Company, including such spare capacity as the Power Company may install in order reasonably to provide for meeting the Power Company's obligations under this Agreement; The Commission shall make no payment to the Transmission Company or to the Power Company for overload or spare capacity so utilized.

4. (*i*) The power and energy delivered hereunder shall be alternating three phase with a periodicity of approximately twenty-five cycles per second at a pressure between phase wires of approximately, but not exceeding, 230,000 volts, at the point of delivery to the Commission by the Transmission Company, subject to a reduction of not over fifteen per cent. from the said voltage from time to time as the Commission may direct; and the equipment and the apparatus installed by the Power Company in its plants shall be suitable to obtain this condition, provided, however, that nothing herein shall be construed as obligating the Power Company to operate its apparatus in excess of its rated capacity at normal voltage; The Power Company shall maintain the generator voltage within two per cent. (2%) of the generator voltage corresponding to the voltage directed by the Commission as aforesaid and shall maintain suitable equipment for such purpose, provided that if the Commission at any time takes power, as provided for in Clause 4 (*h*), in excess of the Contract Demand, then the Power Company shall, during such excess taking, maintain the voltage and frequency as aforesaid as nearly as possible with the equipment then installed;

4. (*j*) Whenever the Commission shall require, from time to time, the Power Company shall increase or decrease the voltage and frequency of its plant or plants, within safe operating limits of the then existing equipment of such plant or plants to the extent required by the Commission in order to ensure operation satisfactory to the Commission in parallel with other sources of supply; It is understood and agreed that in operation of plants in parallel the control of power factor and power delivery in any generating plant is to a large extent within the control of the operators in that plant and the Power Company agrees, so far as it can do so with its equipment installed, to so operate its plant as to maintain a power factor at its points of measurement to the Commission, and also the delivery of power, within the limits directed by the Commission from time to time, provided that by so doing it shall if and to the extent necessary be relieved from its obligations as to voltage and frequency regulation specified in Clause 4 (*i*);

4. (*k*) If the Commission shall take in any week more kilowatt hours than it is entitled under Clause 4 (*d*) to take in such week, and the Power Company shall not in advance of such excess taking have filed with the Commission a protest as hereinafter provided, then upon notification from the Power Company the Commission will adjust the matter by making a corresponding reduction in its takings in the next following week in which its requirements permit it to do so, and the Commission shall not be subject to any penalty for such excess taking, or for any delay in making good the same. A protest from the Power Company for the purpose of this clause must be based upon a prior excess taking by the Commission and may not cover a period beyond the six months next following such excess taking. After receipt of such protest and during the period covered thereby the Commission shall use its best efforts to limit its weekly taking to the number of kilowatt hours which it is entitled to take under Clause 4 (*d*), always provided that the Power Company, so far as practicable, regulates the rate of delivery of power and kilowatt hours from time to time as the Commission may direct;

4. (*l*) For all purposes of this agreement the Power Company shall be considered to have held available for the Commission in each week all the horsepower and kilowatt hours to which the Commission was entitled in that week unless the Power Company fails to have available the power and energy which the Commission asks for, being entitled to the same under the provisions hereof, and unless within fourteen (14) days after the end of that week the Commission shall have given to the Power Company written notice of the fact and approximate amount of the deficiency;

4. (*m*) Because of the fact that the high voltage circuits mentioned in this agreement are physically connected and operated in parallel with those from other power sources, and because of the magnitude and nature of the system involved, it is necessary that the parties hereto

co-operate. The parties hereto shall co-operate in respect of all matters of common interest including plant and equipment design, hydrology and storage, provided that each of the parties shall have the final decision and be responsible for its respective plant and properties. The parties hereto shall also co-operate in respect of design of control, protective, communication and other such features as necessitate a similar or co-ordinated equipment at the plants of each party. The parties hereto shall from time to time make such commercially reasonable changes in, or additions to the equipment owned by them respectively (other than major equipment) as will best serve the system as a whole. Neither the Power Company nor the Transmission Company shall be obligated to install apparatus for a maximum voltage higher than that available from apparatus which the manufacturers are willing to build and recommend for use on a two hundred and twenty thousand (220,000) volt system and in connection with standard two hundred and twenty thousand (220,000) volt switching and auxiliary equipment or higher than the Commission provides for in its portion of the two hundred and twenty thousand (220,000) volt system. The parties hereto shall exercise all due skill and diligence so as to secure the satisfactory operation as a system of the plant, apparatus and property of the several parties hereto;

The Power Company and the Transmission Company, or either of them, shall, if requested by the Commission, replace, rebuild or improve circuit breakers, relays and other apparatus belonging to them respectively for the purpose of enabling the Commission to transmit more power over its own lines or for the purpose of improving the operation of its own system; the Commission shall reimburse the Power Company and the Transmission Company for all necessary and reasonable expenditures made by them respectively to effect such replacement, rebuilding or improvement requested by the Commission for any of the purposes aforesaid;

5. (*a*) The measurement of electrical power and energy under this Agreement shall be made by means of suitable polyphase recording demand meters and integrating kilowatt-hour meters provided and installed by the Power Company and the said meters shall be arranged so as to measure and record accurately the said power and energy. Readings from the said kilowatt-hour meters shall be taken daily at the same hour and recorded by the Power Company on forms supplied by the Commission. Records from the said kilowatt-hour meters and the said recording demand meters shall be dated and forwarded promptly by the Power Company to the Commission and such records on file with the Commission shall be available to the Power Company for inspection at all reasonable times:

5. (*b*) The weekly taking of energy shall be determined from the weekly readings of the said kilowatt-hour meters. The power delivered under this Agreement shall be that recorded by the above mentioned polyphase recording demand meters and shall be the greatest integrated demand for any twenty (20) consecutive minutes as determined from coincident readings of the meters used in the measurement of this power, provided that nothing in this clause shall be construed as increasing any obligation of the Power Company under Clause 1, or increasing any obligation of the Commission under Clause 3:

5. (*c*) The power and energy supplied under this Agreement shall be measured on the generator voltage side of the two hundred and thirty thousand (230,000) volt step-up transformers at Farmer's, Chelsea and/or Paugan and no adjustment of such measurement shall be required, the loss in single step transformation from generator to transmission voltage (approximately 230,000 volts as above) and transmission at this voltage from the transforming station or stations to the point of delivery having already been considered in the price herein specified:

5. (*d*) Access to said instruments and transformers belonging to the Power Company shall be free to the Commission at any and all times and the Commission may test such measuring instruments and transformers at any reasonable time, by giving to the Power Company seven (7) days' previous notice in writing, of its desire to test such measuring instruments and the Power Company shall be entitled to have a representative present while such test is being made;

5. (*e*) Measuring instruments with the necessary current and potential transformers for the measurement of electrical power and energy hereunder shall be provided, installed and maintained by the Power Company;

The Power Company agrees to test each meter installed by it to measure the electrical power and energy contracted for hereunder, at least once in each sixty (60) days; The Commission shall be advised at least five (5) days before the day of the test so it may if it so desires have a representative present to witness and verify such test; If at any time the Commission notifies the Power Company that it believes that such meters or any of them are not within the closest practicable approximation to perfect accuracy, said meter or meters shall be jointly tested within five (5) days of the receipt by the Power Company of the said notice; If any meter shall be found, on regular or special test, to be inaccurate, it shall be properly adjusted and the record of its readings taken since the last prior test and all bills affected shall be corrected; The Power Company shall repair or replace and retest defective meters or measuring equipment within a reasonable time; During any time there is no meter in service it shall be assumed that the power and energy taken is the same as for other days of the same month on which a similar load existed;

5. (*f*) The Commission may from time to time at its option install duplicate measuring equipment including necessary current and potential transformers at the points of measurement for the purpose of checking the records obtained from the Power Company's measuring equipment or for any other purpose;

5. (*g*) The Power Company shall be responsible for any damages to property or apparatus furnished by the Commission for the purpose of supplying or measuring power hereunder and installed on the Power Company's property, providing such damage originates from a source external to the said apparatus of the Commission and is not due to defects in the apparatus of the Commission;

5. (*h*) The kilowatts, kilovolt amperes, kilowatt hours, or any other factor or quantities shall be determined directly or indirectly from the measuring equipment provided for in this Clause 5 and University of Toronto electrical standards shall be used as the final reference as to the accuracy of measuring equipment;

6. Subject to the direction of the Commission, as provided in Clause 4, the maintenance by the Power Company and the Transmission Company of approximately the agreed voltage, at approximately the agreed frequency at the point of delivery to the Commission, together with the ability and readiness of the said Companies to meet the requirements of the Commission under this Agreement, shall constitute the delivery of power and energy involved in this Agreement, provided, however, that the provision in Clause 4 (*i*) as to 2% regulation of voltage shall apply only at the points of generation:

7. (*a*) In case the Power Company or the Transmission Company shall, at any time, or times, be prevented from delivering, or the Commission from receiving the said power, or any part thereof, by strike, lockout, riot, fire, invasion, explosion, act of God, the King's enemies, or any other similar cause or causes reasonably beyond the control of them or any of them, then to the extent of such prevention, the Power Company and the Transmission Company shall not be bound to deliver such power during such time and the amount of the Contract Demand shall be deemed to be reduced for the purpose of computing the amount of power for which the Commission shall be obligated to pay during the period of such prevention by the amount of power which the Power Company or Transmission Company is prevented from delivering or the Commission is prevented from receiving as the case may be;

Each party shall be prompt and diligent in removing the cause of such interruption (and to this end shall in advance of any such interruption provide a reasonable reserve of spare parts and apparatus), and as soon as the cause of such interruption is removed, the Power Company and the Transmission Company shall without any delay, deliver said power as aforesaid and the Commission shall pay for the same;

7. (*b*) The Power Company and the Transmission Company respectively shall have the right at reasonable times and when possible after due notice has been given to the Commission to discontinue or reduce to the extent necessary the supply of power to the Commission for the purpose of safeguarding life or property, or for the purpose of making repairs, renewals or replacements to the generating, transforming, or transmitting equipment, but all such interruptions, total or partial, shall be of minimum duration, and when possible arranged for at a time least objectionable to the Commission;

During such interruptions, the Commission shall be released from its obligation to pay for such power as the Commission is entitled to receive and the Power Company or the Transmission Company fails to deliver:

8. One or more representatives or engineers of the Commission designated for this purpose, may, at any reasonable time, during the continuance of this Agreement, have access to the premises of the Power Company and of the Transmission Company for the purpose of inspecting the premises, apparatus, plants, property and electrical and hydraulic records of the said Companies and to take and obtain records therefrom as required: Representatives of the Power Company shall have similar rights in respect of the premises, apparatus, plants, property and electrical and hydraulic records of the Commission pertaining to the operation of this Agreement:

9. The Commission may waive any default under this Agreement but such waiver shall be limited to the particular instance and shall not affect the Commission's rights under this Agreement:

10. In case of the failure of the Power Company or of the Transmission Company in any week to deliver the full amount of electrical energy to which the Commission is entitled under Clause 4 (*d*) in such week, there shall be a proportionate reduction in the sums payable by the Commission to the Power Company in respect of the Contract Demand for such week; that is, the amount accrued due from the Commission to the Power Company in respect of the Contract Demand during such week shall be reduced by a sum having the same ratio to such accrued amount as the number of kilowatt hours which the Power Company or the Transmission Company fails to deliver as aforesaid bears to eighty-eight (88) times the horsepower of the then Contract Demand; Provided that in respect of any one week the Commission shall be entitled to only

one reduction in the amount owing for such week, such reduction being either in respect of energy as provided in this Clause 10 or in respect of power as provided in Clauses 7 (*a*) and 7 (*b*) whichever reduction shall be greater; and in addition if such failure of the Power Company or Transmission Company is due to causes within its control (deficiency of stream flow or any of the matters in Clause 7 (*a*) shall not for the purposes of this clause be deemed to be within the control of the said Companies nor shall interruptions within Clause 7 (*b*), but financial difficulties are to be considered within the control of the said Companies), the Power Company shall pay to the Commission, as liquidated damages, a sum equal until October 1st, 1943, to Fifty Per Cent. (50%) of the reduction so made in the sums payable by the Commission to the Power Company, thereafter, to One Hundred Per Cent. (100%):

11. The Commission shall be entitled at the termination of this Agreement, or within Thirty days thereafter, to remove from the premises of either of said Companies any and all plant or equipment which may have been installed by the Commission for the supply or measurement of power or energy hereunder:

12. All written notices to be delivered hereunder by any party to any other may be sent by prepaid registered letter to such address or addresses as each party shall from time to time file with the others. The Parties agree each to maintain its address on file with the others and in default such address shall in the case of the Power Company and the Transmission Company be deemed to be the City of Ottawa and in the case of the Commission the City of Toronto:

13. The Commission agrees to observe strictly all Quebec and other laws affecting the exportation, outside of Canada, of the electric power or energy supplied under this Agreement:

14. This Agreement shall be binding on the Parties hereto upon its execution and shall take effect as of November 1st, 1935 and shall continue in effect until cancelled by written notice delivered by the Power Company to the Commission or by the Commission to the Power Company not less than two full years prior to the termination date therein specified, which date shall be September 30th of a year not earlier than 1945:

15. The Power Company and the Commission hereby respectively vest in the Transmission Company all right, title and interest of each of them respectively (if any) in the transmission lines of the Transmission Company extending from the point where the Power Company's lines connect therewith to the point ten (10) feet on the Ontario side of the boundary between the Provinces of Ontario and Quebec where the said transmission lines of the Transmission Company connect with the transmission lines of the Commission, including in the case of the Power Company all servitudes, lands and rights and interest therein used for the purposes of the said lines of the Transmission Company and in the case of the Commission all rights in the nature of an easement or license necessary to the operation, repair and maintenance of the said lines and other necessary incidental rights:

16. This contract shall be construed according to the laws of the Province of Ontario:

In witness whereof the Parties hereto have caused this Agreement to be executed under their corporate seals and the hands of their duly authorized officers.

Signed, Sealed and Delivered
In the presence of

The Hydro-Electric Power Commission of Ontario.
(Seal)
(Sgd.) T. S. Lyon,
Chairman.

(Sgd.) A. Murray McCrimmon,
Secretary.

Gatineau Power Company.
(Seal)
(Sgd.) G. Gordon Gale,
President.

(Sgd.) J. R. Binks,
Secretary.

Gatineau Transmission Company.
(Seal)
(Sgd.) J. B. White,
Vice-President.

(Sgd.) J. R. Binks,
Secretary.

2

This Indenture dated the Eighth day of February, A.D. 1936.

BY AND BETWEEN:

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,
(hereinafter called the "Commission")

GATINEAU POWER COMPANY, a Quebec Corporation,
(hereinafter called the "Power Company")

—and—

GATINEAU TRANSMISSION COMPANY, a Dominion Corporation
(hereinafter called the "Transmission Company")

Whereas the Commission and the Power Company heretofore executed an Indenture dated 28th day of December, 1927, relating to the delivery by the Power Company to the Commission of electrical power or energy with a periodicity of sixty (60) cycles per second upon terms set forth in said Indenture;

And whereas the said parties executed another Indenture supplementary to the first mentioned Indenture;

And whereas the Legislature of the Province of Ontario has declared the said Indentures to be illegal, void and unenforceable as against the Commission;

Now therefore this Indenture witnesseth that for the considerations hereinafter contained the parties hereby covenant, promise and agree as follows:

1. The Power Company covenants and agrees with the Commission and with the Transmission Company:

(*a*) To keep available for delivery to the Transmission Company for transmission and delivery to the Commission, so long as this agreement shall continue in force, sixty thousand (60,000) horsepower of electrical power and energy on the conditions herein contained;

1. (*b*) To deliver to the Transmission Company for transmission and delivery to the Commission when and as ordered by the Commission, so long as this agreement shall continue in force, the Contract Demand, as hereinafter defined, of power and energy on the conditions herein contained;

1. (*c*) To deliver to the Transmission Company for transmission and delivery to the Commission in excess of the Contract Demand, immediately upon notice when and as ordered by the Commission for any of the purposes specified in Clause 4 (*f*), the Immediate Standby, as hereinafter defined, of power on the conditions herein contained;

1. (*d*) To deliver to the Transmission Company for transmission and delivery to the Commission, upon one week's notice when and as ordered by the Commission, as an addition to the Contract Demand all or any part of the General Reserve, as hereinafter defined, of power and energy on the conditions herein contained;

1. (*e*) To maintain in place sufficient equipment in proper and efficient operable condition so as to insure fulfilment at all times of the terms of this agreement;

1. (*f*) To use its best efforts to have maintained the existing storage capacity on the Gatineau River and to use its best efforts to have the storage on the said river administered and controlled to the best advantage with a view to the delivery of power and energy in accordance with the provisions of this agreement; and for the purposes aforesaid, duly to make all payments and do all things fully to perform and discharge the Power Company's obligations under its agreements with the Minister of Lands and Forests of the Province of Quebec, relating to the provision, maintenance and administration of the said storage; to deliver the full Contract Demand and all the energy required under this agreement at all times when the average weekly stream flow at Chelsea would be at least equal to a normal minimum of ten thousand six hundred (10,600) cubic feet per second as determined by the Quebec Streams Commission with a capacity of one hundred and forty billion (140,000,000,000) cubic feet of storage; at all times when with storage capacity provided to the amount of one hundred and forty billion (140,000,000,000) cubic feet the river would not have provided an average weekly stream flow at Chelsea of ten thousand six hundred (10,600) cubic feet per second, the amount of electrical energy to which the Commission is entitled hereunder shall, during the period of such deficiency, be reduced by the same percentage by which the average weekly stream flow available with storage capacity to the amount of one hundred and forty billion (140,000,000,000) cubic feet would have fallen below the said average weekly rate of ten thousand six hundred (10,600) cubic feet per second:

Provided that the storage mentioned in this clause shall be the same and shall not be in addition to the storage mentioned in the contract between the Company, the Transmission Company and the Commission of even date herewith covering the delivery of twenty-five (25) cycle power:

1. (*g*) That the Transmission Company will fulfill its obligations to the Commission under this agreement:

2. The Transmission Company covenants and agrees with the Commission:

(*a*) To provide and maintain the presently existing 110,000 volt double circuit line from the Power Company's switching station at Hull to a point in Ontario ten (10) feet within the Interprovincial boundary where the same connects with the transmission line of the Commission:

2. (*b*) To receive from the Power Company and to transmit over its transmission line and to deliver to the Commission at said point within the Province of Ontario the electrical power and energy covered by this agreement;

2. (*c*) To maintain the aforesaid transmission line in a proper and efficient manner and at least up to the present standard of the transmission line of the Commission used to further transmit such power and energy;

2. (*d*) To maintain a two wire telephone line between the Power Company's switching station at Hull and the point of connection with the telephone lines of the Commission and to permit the free use of said communication system to the Power Company and to the Commission for the proper control and delivery of the power specified in this agreement:

3. The Commission covenants and agrees with the Power Company and with the Transmission Company:

(*a*) To make monthly payments to the Power Company at the rate of twelve dollars and fifty cents ($12.50) per annum per horsepower of Contract Demand, determined as provided in Clause 4 (*a*); the said monthly payments under this paragraph being subject always to adjustments as in this Agreement provided;

3. (*b*) To make monthly payments to the Power Company at the rate of ten dollars ($10.00) per annum per horsepower of the Immediate Standby, determined as provided in Clause 4 (*b*);

3. (*c*) To make monthly payments to the Power Company at the rate of one dollar and seventy-five cents ($1.75) per annum per horsepower of the General Reserve, determined as provided in Clause 4 (*c*);

3. (*d*) To make all payments to be made by it under this Agreement in lawful money of Canada at Toronto;

3. (*e*) To indemnify the Power Company and the Transmission Company against and reimburse them respectively for any and all taxes, fees and other charges which may at any time be levied, assessed or imposed by the Province of Ontario or any authority thereof or thereunder, including any municipality and school authority therein, in respect or by reason off (*a*) the ownership, operation, maintenance or use of the ten feet of transmission line in Ontario contemplated by the provisions of Clause 2, or (*b*) the transmission, sale or delivery of power or energy under this Agreement, or (*c*) the gross or net income derived therefrom, or (*d*) the transaction of business involved in the performance of this Agreement or the operation of the said part of the said transmission line, whether any such tax, fee or other charge is levied, assessed or imposed upon either the Power Company or the Transmission Company or the property of either of them;

3. (*f*) To make the said monthly payments to the Power Company on the 20th day of each calendar month for the accrual of the preceding calendar month, the Power Company to render the bill on or before the 10th; provided that if any bill remains unpaid on the 20th of the month in which it is so rendered the Commission shall thenceforth be in arrears for said payment and all payments in arrears shall bear interest at the rate of five per cent. (5%) per annum; provided further that if the Commission or the Power Company be entitled to any adjustment in respect of any payment, such adjustment shall be given effect to in the monthly payment falling due next after the determination thereof, and no portion of any monthly payment shall be postponed pending determination of any such adjustment, except if and to the extent that any decision or determination on such adjustment (even though under appeal) shall have held the Commission entitled to the adjustment;

3. (*g*) At all times to take and use the three-phase power in such manner that the current will be taken approximately equally from the three phases and in no case shall the difference in current between any two phases be greater than five per cent. (5%); If at any time the difference be greater than five per cent. (5%), the Commission, upon instructions from the Power Company, shall so adjust its load as to comply with these requirements;

3. (*h*) At all times to take and use the Contract Demand and the Immediate Standby so as not to exceed the weekly takings as specified in Clause 4 (*d*);

3. (*i*) To give to the Power Company from time to time such information as it reasonably can regarding its expected requirements in kilowatt hours from the Power Company, particularly as to any probable reduction in such requirements for any prospective period of light load; The intent of the parties in this clause is, so far as is possible by reasonable co-operation, to provide for the most economical use of the storage waters on the Gatineau watershed;

3. (*j*) Until the Contract Demand shall have reached sixty thousand (60,000) horsepower, to purchase from the Power Company all power and energy generated in the Province of Quebec and used by the Commission in its Eastern Ontario System as now constituted or hereafter enlarged (including frequency changers to serve other systems) except such power as the Commission may take from the portion of the Chats Falls development located in the Province of Quebec, and except that in the event of an enlargement of the Eastern Ontario System, the Commission shall be entitled to use in such enlargement any power and energy under contract of purchase by its predecessor in the operation of such enlargement and to continue such use during the period and to the extent for which the Commission is bound to carry out the terms of such contract at the time of the enlargement.

4. (*a*) "Contract Demand" for the purposes of this Agreement shall be defined as follows:

For each month after October, 1935, the Contract Demand shall be the greatest amount of electrical power, not less than forty-two thousand (42,000) horsepower nor more than sixty thousand (60,000) horsepower, which shall then have been ordered in writing by the Commission as the Contract Demand at any time subsequent to the month of October, 1935;

The Contract Demand shall not be increased except upon an order in writing by the Commission;

All increases in the Contract Demand shall decrease the General Reserve, hereinafter defined, by a corresponding amount until such General Reserve shall have been reduced to zero, and thereafter shall decrease the Immediate Standby, as hereinafter defined, by a corresponding amount until such Immediate Standby shall also have been reduced to zero. Thereafter the Contract Demand shall be sixty thousand (60,000) horsepower:

Notwithstanding the provisions of Clause 1 (*d*), the Power Company may in the month of December of any year notify the Commission that it will shortly be necessary for the Power Company to add to its plant or equipment and the Power Company shall be under no obligation to deliver any increase in Contract Demand ordered after such notice for delivery in the year beginning with the succeeding April 1st, until eleven months after the receipt by the Power Company of such order:

4. (*b*) "Immediate Standby" for the purposes of this agreement shall be nine thousand (9,000) horsepower of electrical power until the Contract Demand shall have reached fifty-one thousand (51,000) horsepower, and thereafter shall be the excess, if any, of sixty thousand (60,000) horsepower over the Contract Demand:

4. (*c*) "General Reserve" for the purposes of this agreement shall be the balance, if any, of the sixty thousand (60,000) horsepower of electrical power remaining after deducting the sum of the Contract Demand and the Immediate Standby:

4. (*d*) The Commission shall be entitled at all times, whether or not it is availing itself of its rights to draw upon the Immediate Standby, to an amount of electrical energy which is equivalent to the delivery of the Contract Demand at a weekly load factor of Seventy (70) per cent., that is to say, that during each week the Commission shall be entitled, subject to the provisions of Clause 3 (*i*), to receive such electrical energy in respect of Contract Demand and Immediate Standby combined as it shall require but not in excess of eighty-eight (88) kilowatt-hours for each horsepower of the then Contract Demand:

On Sundays and holidays the Commission, if so requested by the Power Company, shall take or be deemed to have taken not less than three kilowatt-hours for each horsepower of Contract Demand. On Saturdays the Commission, if so requested by the Power Company, shall take or be deemed to have taken not less than seven kilowatt-hours for each horsepower of Contract Demand;

4. (*e*) The amount of electrical power or energy delivered by the Power Company at any time when the ratio of the kilowatts to the kilovolt-amperes is less than eighty-five per cent. (85%) shall be deemed to be eighty-five per cent. (85%) of the kilovolt-amperes;

4. (*f*) In order to avoid or reduce the necessity of the Commission cutting off its load in the event of temporary accidental interruptions of its supply of such short duration as not to justify an increase of its generating capacity or of the Contract Demand hereunder, the Commission may draw upon the Immediate Standby as herein provided;

The Commission shall be entitled, under the provisions of this Clause 4 (*f*), without increasing thereby the Contract Demand, to delivery of such Immediate Standby power as may be necessary, after use of its own available spare capacity, to replace any contracted supply unavailable for the time being due to any one or more of the causes below mentioned or any part of the product of its own plant, apparatus or equipment temporarily out of service due to accident to equipment or apparatus or to wear and tear or the need for repair or to abnormal ice conditions, or operating at reduced capacity due to one or more of these causes, but not so as to increase thereby, by the addition of Immediate Standby power, the power and energy available from the Commission's plant and equipment and contracted supply as it would have been but for such causes. The Commission shall take all reasonable steps to remove or correct such causes as soon as possible. No such delivery of Immediate Standby power will be used to provide for increased load in the Commission's system by reason of bona fide increase in demand by the Commission's customers. No plant, apparatus or equipment shall be voluntarily taken out of service for purposes of repair in the months of November, December and January unless in case of absolute emergency;

The order of the Commission, provided for in Clause 1 (*c*) shall state the amount of the Immediate Standby which it requires and the purpose and estimated period for which its use is required;

4. (*g*) If during any twenty minute period the integrated takings of the Commission exceed the then Contract Demand plus such amount, if any, of the Immediate Standby as the Commission then is taking pursuant to the provisions of Clause 4 (*f*), then until the Commission shall have adjusted its load and supply conditions so that the takings of power and energy hereunder will be limited to the then Contract Demand plus such amount, if any, of the Immediate Standby as it then is so taking, the Power Company, without liability for damages or diminution of the payments specified hereunder, may limit the deliveries of electrical power and energy to an amount not in excess of the then Contract Demand plus such amount, if any, of the Immediate Standby as the Commission then is so taking, and for such purpose decrease either the voltage or the frequency, or both, or may cut off any part or all of the power and energy being supplied to the Commission hereunder. If telephone connection through the normal facilities between the Power Company's switching station at Hull and the Commission's station at Belleville can at the time be made, the Power Company shall not, however so cut off any part or all of the power and energy being supplied to the Commission hereunder until after it has used its best efforts to give fifteen minutes' notice by such telephone connection to an employee of the Commission at said Belleville station;

4. (*h*) The power and energy delivered hereunder shall be alternating three phase with a periodicity of approximately sixty (60) cycles per second at a pressure between phase wires of approximately, but not exceeding, one hundred and fourteen thousand (114,000) volts, at the point of delivery to the Commission by the Transmission Company; The Power Company shall maintain the generator voltage within two per cent. (2%) of the generator voltage corresponding to the said one hundred and fourteen thousand (114,000) volts at the said point of delivery and shall maintain suitable equipment for such purpose;

4. (*i*) The Company at all times shall use its best endeavours to co-operate with the Commission by such means and to the extent it may consider proper to meet the requirements of the Commission in variation of the aforesaid voltage so as to furnish a voltage satisfactory to the Commission; It is understood and agreed that in operation of plants in parallel the control of power factor and power delivery in any generating plant is to a large extent within the control of the operators in that plant and the Power Company agrees, so far as it can do so with its equipment installed and its other load, to so operate its plant as to maintain a power factor at its point of measurement to the Commission, and also the delivery of power, within the limits directed by the Commission from time to time, provided that by so doing it shall if and to the extent necessary be relieved from its obligations as to voltage and frequency regulation specified in Clause 4 (*h*):

4. (*j*) If the Commission shall take in any week more kilowatt hours than it is entitled under Clause 4 (*d*) to take in such week and the Power Company shall not in advance of such excess taking have filed with the Commission a protest as hereinafter provided, then upon notification from the Power Company the Commission will adjust the matter by making a corresponding reduction in its takings in the next following week in which its requirements permit it to do so, and the Commission shall not be subject to any penalty for such excess taking, or for any delay in making good the same; A protest from the Power Company for the purpose of this clause must be based upon a prior excess taking by the Commission and may not cover a period beyond the six months next following such excess taking; After receipt of such protest and during the period covered thereby the Commission shall use its best efforts to limit its weekly taking to the number of kilowatt hours which it is entitled to take under Clause 4 (*d*), always provided that the Power Company, so far as practicable, regulates the rate of delivery of power and kilowatt hours from time to time as the Commission may direct;

4. (*k*) For all purposes of this agreement the Power Company shall be considered to have held available for the Commission in each week all the horsepower and kilowatt hours to which the Commission was entitled in that week unless the Power Company fails to have available the power and energy which the Commission asks for, being entitled to the same under the provisions hereof, and unless within fourteen (14) days after the end of that week the Commission shall have given to the Power Company written notice of the fact and approximate amount of the deficiency;

4. (*l*) Because of the fact that the high voltage circuits mentioned in this agreement are physically connected and operated in parallel with those from other power sources, and because of the magnitude and nature of the system involved, it is necessary that the parties hereto co-operate. The parties hereto shall co-operate in respect of all matters of common interest including plant and equipment design, hydrology and storage, provided that each of the parties shall have the final decision and be responsible for its respective plant and properties. The parties hereto shall also co-operate in respect of design of control, protective, communication and other such features as necessitate a similar or co-ordinated equipment at the plants of each party. The parties hereto shall from time to time make such commercially reasonable changes in, or additions to the equipment owned by them respectively (other than major equipment) as will best serve the system as a whole. The parties hereto shall exercise all due skill and diligence so as to secure the satisfactory operation as a system of the plant, apparatus and property of the several parties hereto;

5. (*a*) The measurement of electrical power and energy under this Agreement shall be made by means of suitable polyphase recording demand meters and integrating kilowatt-hour meters provided and installed by the Power Company and the said meters shall be arranged so as to measure and record accurately the said power and energy. Readings from the said kilowatt-hour meters shall be taken daily at the same hour and recorded by the Power Company on forms supplied by the Commission. Records from the said kilowatt-hour meters and the said recording demand meters shall be dated and forwarded promptly by the Power Company to the Commission and such records on file with the Commission shall be available to the Power Company for inspection at all reasonable times;

5. (*b*) The weekly taking of energy shall be determined from the weekly readings of the said kilowatt-hour meters. The power delivered under this Agreement shall be that recorded by the above mentioned polyphase recording demand meters and shall be the greatest integrated demand for any twenty (20) consecutive minutes as determined from coincident readings of the meters used in the measurement of this power, provided that nothing in this clause shall be construed as increasing any obligation of the Power Company under Clause 1, or increasing any obligation of the Commission under Clause 3;

5. (*c*) The power and energy supplied under this Agreement shall be measured at the Power Company's switching station at Hull at the transmission voltage of one hundred and fourteen thousand (114,000) volts and no adjustment of such measurement shall be required, the loss in transmission at this voltage from the said switching station to the point of delivery having already been considered in the price herein specified;

5. (*d*) Access to said instruments and transformers belonging to the Power Company shall be free to the Commission at any and all times and the Commission may test such measuring instruments and transformers at any reasonable time, by giving to the Power Company seven (7) days' previous notice in writing, of its desire to test such measuring instruments and the Power Company shall be entitled to have a representative present while such test is being made;

5. (*e*) Measuring instruments with the necessary current and potential transformers for the measurement of electrical power and energy hereunder shall be provided, installed and maintained by the Power Company;

The Power Company agrees to test each meter installed by it to measure the electrical power and energy contracted for hereunder, at least once in each sixty (60) days; The Commission shall be advised at least five (5) days before the day of the test so it may if it so desires have a representative present to witness and verify such test; If at any time the Commission notifies the Power Company that it believes that such meters or any of them are not within the closest practicable approximation to perfect accuracy, said meter or meters shall be jointly tested within five (5) days of the receipt by the Power Company of the said notice; If any meter shall be found, on regular or special test, to be inaccurate, it shall be properly adjusted and the record of its readings taken since the last prior test and all bills affected shall be corrected; The Power Company shall repair or replace and retest defective meters or measuring equipment within a reasonable time; During any time there is no meter in service it shall be assumed that the power and energy taken is the same as for other days of the same month on which a similar load existed;

5. (*f*) The Commission may from time to time at its option install duplicate measuring equipment including necessary current and potential transformers at the point of measurement for the purpose of checking the records obtained from the Power Company's measuring equipment or for any other purpose;

5. (*g*) The Power Company shall be responsible for any damages to property or apparatus furnished by the Commission for the purpose of supplying or measuring power hereunder and installed on the Power Company's property, providing such damage originates from a source external to the said apparatus of the Commission and is not due to defects in the apparatus of the Commission;

5. (*h*) The kilowatts, kilovolt amperes, kilowatt hours, or any other factor or quantities shall be determined directly or indirectly from the measuring equipment provided for in this Clause 5 and University of Toronto electrical standards shall be used as the final reference as to the accuracy of measuring equipment;

6. The maintenance by the Power Company and the Transmission Company of approximately the agreed voltage, at approximately the agreed frequency at the point of delivery to the Commission, together with the ability and readiness of the said Companies to meet the requirements of the Commission under this Agreement, shall constitute the delivery of power and energy involved in this Agreement, provided, however, that the provision in Clause 4 (*h*) as to 2% regulation of voltage shall apply only at the points of generation;

7. (*a*) In case the Power Company or the Transmission Company shall, at any time or times, be prevented from delivering, or the Commission from receiving the said power, or any part thereof, by strike, lockout, riot, fire, invasion, explosion, act of God, the King's enemies, or any other similar cause or causes reasonably beyond the control of them or any of them, then to the extent of such prevention, the Power Company and the Transmission Company shall not be bound to deliver such power during such time and the amount of the Contract Demand shall be deemed to be reduced for the purpose of computing the amount of power for which the Commission shall be obligated to pay during the period of such prevention by the amount of power which the Power Company or Transmission Company is prevented from delivering or the Commission is prevented from receiving as the case may be;

Each party shall be prompt and diligent in removing the cause of such interruption (and to this end shall in advance of any such interruption provide a reasonable reserve of spare parts and apparatus), and as soon as the cause of such interruption is removed, the Power Company and the Transmission Company shall without any delay, deliver said power as aforesaid and the Commission shall pay for the same;

7. (*b*) The Power Company and the Transmission Company respectively shall have the right at reasonable times and when possible after due notice has been given to the Commission to discontinue or reduce to the extent necessary the supply of power to the Commission for the purpose of safeguarding life or property, or for the purpose of making repairs, renewals or replacements to the generating, transforming, or transmitting equipment, but all such interruptions, total or partial, shall be of minimum duration, and when possible arranged for at a time least objectionable to the Commission;

During such interruptions, the Commission shall be released from its obligation to pay for such power as the Commission is entitled to receive and the Power Company or the Transmission Company fails to deliver:

8. One or more representatives or engineers of the Commission designated for this purpose, may, at any reasonable time, during the continuance of this Agreement, have access to the premises of the Power Company and of the Transmission Company for the purpose of inspecting the premises, apparatus, plants, property and electrical and hydraulic records of the said Companies and to take and obtain records therefrom as required: Representatives of the Power Company shall have similar rights in respect of the premises, apparatus, plants, property and electrical and hydraulic records of the Commission pertaining to the operation of this Agreement:

9. The Commission may waive any default under this Agreement but such waiver shall be limited to the particular instance and shall not affect the Commission's rights under this Agreement:

10. In case of the failure of the Power Company or of the Transmission Company in any week to deliver the full amount of electrical energy to which the Commission is entitled under Clause 4 (*d*) in such week, there shall be a proportionate reduction in the sums payable by the Commission to the Power Company in respect of the Contract Demand for such week; that is, the amount accrued due from the Commission to the Power Company in respect of the Contract Demand during such week shall be reduced by a sum having the same ratio to such accrued amount as the number of kilowatt hours which the Power Company or the Transmission Company fails to deliver as aforesaid bears to eighty-eight (88) times the horsepower of the then Contract Demand; Provided that in respect of any one week the Commission shall be entitled to only one reduction in the amount owing for such week, such reduction being either in respect of energy as provided in this Clause 10 or in respect of power as provided in Clauses 7 (*a*) and 7 (*b*), whichever reduction shall be greater; and in addition if such failure of the Power Company or Transmission Company is due to causes within its control (deficiency of stream flow or any of the matters in Clause 7 (*a*) shall not for the purposes of this clause be deemed to be within the control of the said Companies nor shall interruptions within Clause 7 (*b*), but financial difficulties are to be considered within the control of the said Companies), the Power Company shall pay to the Commission, as liquidated damages, a sum equal until October 1st, 1943, to Fifty Per Cent. (50%) of the reduction so made in the sums payable by the Commission to the Power Company, thereafter, to One Hundred Per Cent. (100%):

11. The Commission shall be entitled at the termination of this Agreement, or within Thirty days thereafter, to remove from the premises of either of said Companies any and all plant or equipment which may have been installed by the Commission for the supply or measurement of power or energy hereunder:

12. All written notices to be delivered hereunder by any party to any other may be sent by prepaid registered letter to such address or addresses as each party shall from time to time file with the others. The Parties agree each to maintain its address on file with the others and in default such address shall in the case of the Power Company and the Transmission Company be deemed to be the City of Ottawa and in the case of the Commission the City of Toronto:

13. The Commission agrees to observe strictly all Quebec and other laws affecting the exportation, outside of Canada, of the electric power or energy supplied under this Agreement:

14. This Agreement shall be binding on the Parties hereto upon its execution and shall take effect as of November 1st, 1935 and shall continue in effect until cancelled by written notice delivered by the Power Company to the Commission or by the Commission to the Power Company not less than two full years prior to the termination date therein specified, which date shall be September 30th of a year not earlier than 1945:

15. The Power Company and the Commission hereby respectively vest in the Transmission Company all right, title and interest of each of them respectively (if any) in the transmission line of the Transmission Company extending from the point where the Power Company's lines connect therewith to the point ten (10) feet on the Ontario side of the boundary between the Provinces of Ontario and Quebec where the said transmission line of the Transmission Company connect with the transmission line of the Commission, including in the case of the Power Company all servitudes, lands and rights and interest therein used for the purposes of the said line of the Transmission Company and in the case of the Commission all rights in the nature of an easement or license necessary to the operation, repair and maintenance of the said line and other necessary incidental rights:

16. This contract shall be construed according to the laws of the Province of Ontario:

In witness whereof the parties hereto have caused this Agreement to be executed under their corporate seals and the hands of their duly authorized officers:

SIGNED, SEALED AND DELIVERED
In the presence of

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.
(Seal)

(Sgd.) T. S. LYON,
Chairman.

(Sgd.) A. MURRAY MCCRIMMON,
Secretary.

GATINEAU POWER COMPANY.
(Seal)

(Sgd.) G. GORDON GALE,
President.

(Sgd.) J. R. BINKS,
Secretary.

GATINEAU TRANSMISSION COMPANY.
(Seal)

(Sgd.) J. B. WHITE,
Vice-President.

(Sgd.) J. R. BINKS,
Secretary.

APPENDIX II

TRANSMISSION LINE RECORDS

Corrected to October 31, 1936

including

Summaries of data respecting mileage of transmission lines
built or acquired by
The Hydro-Electric Power Commission of Ontario

APPENDIX

TOTAL MILEAGE OF TRANSMISSION LINES AND NUMBER OF

System and voltage	Line route miles		
	Total to Oct. 31, 1935	Additions 1936	Total to Oct. 31, 1936
Niagara System			
220,000-volt	705.27	....	705.27
110,000-volt	713.70	....	713.70
110,000-volt	67.16	....	67.16
90,000-volt	65.85	....	65.85
60,000-volt	94.23	....	94.23
60,000-volt	23.72	0.23	23.95
46,000-volt	16.92	....	16.94
46,000-volt	21.54	0.34	21.88
30,000-volt	13.29	*13.29	....
26,400-volt	610.35	*2.17	608.18
13,200-volt	432.42	20.74	453.16
13,200-volt	0.71	*0.15	0.56
12,000-volt	121.50	*9.74	111.76
Dominion Power division—44,000-volt	37.31	....	37.31
Dominion Power division—44,000-volt	141.46	*0.10	141.36
Dominion Power division—22,000-volt	28.10	....	28.10
Dominion Power division—22,000-volt (concrete poles)	9.00	....	9.00
Dominion Power division—10,000-volt	14.52	....	14.52
Georgian Bay System			
110,000-volt	55.82	....	55.83
38,000-volt	54.28	*13.44	40.84
22,000-volt	....	13.44	13.44
6,600-volt	2.30	....	2.30
Severn district—22,000-volt	176.46	....	176.46
Eugenia district—26,400-volt and less	321.00	....	321.00
Wasdell district—22,000-volt	83.72	....	83.72
Muskoka district—38,000-volt and less	26.46	....	26.46
Eastern Ontario System			
110,000-volt	107.08	....	107.08
110,000-volt	43.12	....	43.12
44,000-volt	24.33	....	24.33
33,000-volt	33.86	....	33.86
Central district—44,000-volt and less	503.06	....	503.06
St. Lawrence district—44,000-volt	125.13	*0.11	125.02
Rideau district—33,000-volt and less	76.99	....	76.99
Madawaska district—38,000-volt and less	58.71	0.10	58.81
Thunder Bay System			
110,000-volt	82.12	....	82.12
110,000-volt	83.33	....	83.33
22,000-volt	0.35	....	0.35
12,000-volt	1.45	....	1.45
Northern Ontario Properties			
Abitibi district—132,000-volt	361.96	0.78	362.74
132,000-volt	94.86	87.18	182.04
26,400-volt and less	28.18	4.68	32.86
Nipissing district—22,000-volt	51.39	0.28	51.67
Sudbury district—22,000-volt	58.21	2.87	61.08
St. Joseph district—22,000-volt	26.40	1.74	28.14
Espanola district—33,000-volt	10.74	....	10.74
Total	5,608.39	†93.38	5,701.77

*Removals. †Net increase.

II

SUPPORTING STRUCTURES CONSTRUCTED AND ACQUIRED

Circuit miles			Number of steel towers			Number of wood poles		
Total to Oct. 31, 1935	Additions 1936	Total to Oct. 31, 1936	Total to Oct. 31, 1935	Additions 1936	Total to Oct. 31, 1936	Total to Oct. 31, 1935	Additions 1936	Total to Oct 31, 1936
705.27	....	705.27	3,522	....	3,522	....	....	....
1,372.76	....	1,372.76	6,562	....	6,562	....	....	....
67.16	....	67.16	....	....	....	824	....	824
128.72	....	128.72	409	....	409	....	....	....
74.86	....	74.86	941	8	949	....	....	....
23.72	0.23	23.95	....	....	....	641	3	644
50.16	....	50.16	375	....	375	....	....	....
21.54	0.34	21.88	....	....	....	673	12	685
26.58	*26.58	....	....	....	....	612	*612	....
779.97	*3.44	776.53	....	....	....	23,634	*74	23,560
517.42	20.89	538.31	....	....	....	17,379	450	17,829
1.42	*0.30	1.12	16	*2	14	....	....	....
191.88	*24.22	167.66	7	....	7	5,061	*472	4,589
74.62	....	74.62	526	....	526	....	....	....
137.84	*0.10	137.74	....	....	....	5,120	*45	5,075
33.45	....	33.45	....	....	....	1,293	....	1,293
18.00	....	18.00	....	....	....	253	....	253
14.52	....	14.52	....	....	....	498	....	498
55.83	....	55.83	....	....	....	548	....	548
54.28	*13.44	40.84	....	....	....	684	*211	473
....	13.44	13.44	....	....	....	....	211	211
2.30	....	2.30	....	....	....	101	....	101
247.63	....	247.63	....	....	....	7,457	*5	7,452
404.39	....	404.39	....	....	....	12,636	*4	12,632
87.66	....	87.66	....	....	....	3,267	....	3,267
26.46	....	26.46	....	....	....	1,148	....	1,148
110.39	....	110.39	636	....	636	....	....	....
43.12	....	43.12	....	....	....	646	....	646
24.33	....	24.33	....	....	....	286	....	286
33.86	....	33.86	....	....	....	921	....	921
554.29	....	554.29	2	....	2	17,929	....	17,929
125.13	*0.11	125.02	....	....	....	4,334	*5	4,329
76.99	....	76.99	....	....	....	2,870	....	2,870
58.71	0.10	58.81	....	....	....	1,965	....	1,965
164.28	....	164.28	539	....	539	....	....	....
83.33	....	83.33	....	....	....	1,352	....	1,352
0.35	....	0.35	....	....	....	15	....	15
1.45	....	1..45	....	....	....	61	....	61
723.92	1.56	725.48	1,875	5	1,880	....	....	....
94.86	87.18	182.04	....	....	....	1,371	1,229	2,600
28.18	4.68	32.86	....	....	....	1,001	140	1,141
67.91	0.28	68.19	....	....	....	1,839	....	1,839
58.21	2.87	61.08	2	....	2	3,373	81	3,454
26.40	1.74	28.14	....	....	....	692	54	746
10.74	....	10.74	1	....	1	291	....	291
7,404.89	†65.12	7,470.01	15,413	†11	15,424	120,775	†752	121,527

APPENDIX II

LINES FOR THE USE OF

System	Total route miles			Miles of single-circuit line		
	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936
Niagara system	706.08	*33.33	672.75	323.66	*75.87	247.79
Dominion Power division						
Georgian Bay system						
Eastern Ontario system	8.35		8.35	5.50		5.50
Thunder Bay system						
Northern Ontario properties	250.80	31.05	281.85	246.54	26.56	273.10
Totals	965.23	*2.28	‡962.95	575.70	*49.31	526.39

Included in totals are 1.30 miles of 8-circuit line and 0.18 miles of 7-circuit line (E.O. system),
‡This total exclusive of telephone cable.
*Removals.

TELEPHONE CIRCUITS CARRIED

System	Total route miles			Miles of single-circuit line		
	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936
Niagara system and N.A.	1,060.73	40.68	1,101.41	974.10	38.99	1,013.09
Dominion Power division	20.01	0.21	20.22	14.82	0.21	15.03
Georgian Bay system	709.06	*0.48	708.58	645.38	*0.19	645.19
Eastern Ontario system	841.75	8.52	850.27	752.17	24.04	776.21
Thunder Bay system	97.86		97.86	97.86	*5.70	92.16
Northern Ontario properties	320.40	14.60	335.00	319.87	14.60	334.47
Totals	3,049.81	†63.53	‡3,113.34	2,804.20	†71.95	2,876.15

*Removals. †Net increase. ‡This total exclusive of telephone cable.
Derived (carrier and phantom) circuits to Oct. 31, 1935 — Niagara system — 298.69 miles,
Derived (carrier and phantom) circuits to Oct. 31, 1936 — Niagara system — 298.69 miles,
These circuits are additional to the above tabulation but are made available by utilizing listed

(Concluded)

TELEPHONE CIRCUITS ONLY

Miles of double-circuit line			Miles of three-circuit line			Miles of four-circuit line			Miles of telephone cable		
Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936
273.70	54.82	328.52	9.08	....	9.08	93.84	*18.74	75.10	27.56	*2.39	25.17
....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....
1.37	....	1.37	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....
4.26	4.49	8.75	....	....	....	....	....	....	0.35	0.90	1.25
279.33	59.31	338.64	9.08	....	9.08	93.84	*18.74	75.10	27.91	*1.49	26.42

and 5.80 miles of 6-circuit line and 7.06 miles of 5-circuit line in Niagara system.

JOINTLY WITH POWER CIRCUITS

Miles of double-circuit line			Miles of three-circuit line			Miles of four-circuit line			Miles of telephone cable		
Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936	Completed to Oct. 31, 1935	Completed Oct. 31, 1935 to Oct. 31, 1936	Total to Oct. 31, 1936
81.18	*1.61	79.57	4.45	*3.66	0.79	1.00	6.96	7.96	....	3.46	3.46
5.19	....	5.19	....	....	....	....	....	....	....	....	....
56.63	*0.79	55.84	7.05	0.50	7.55	....	....	....	....	....	....
89.58	*15.52	74.06	....	....	....	....	....	....	....	....	....
....	5.70	5.70	....	....	....	....	....	....	....	....	....
0.53	....	0.53	....	....	....	....	....	....	....	....	....
233.11	*12.22	220.89	11.50	*3.16	8.34	1.00	6.96	7.96	....	3.46	3.46

Eastern Ontario system—12.70 miles.
Eastern Ontario system—12.70 miles.
physical circuits.

APPENDIX III

CONSTRUCTION IN RURAL POWER DISTRICTS

Summary of Data respecting distribution lines in Rural Power Districts constructed by The Hydro-Electric Power Commission of Ontario

Below is shown in tabular form the work carried on under the supervision of the Distribution section of the Electrical Engineering department in Rural Power Districts during the year ended October 31, 1936.

SUMMARY OF CONSTRUCTION IN RURAL POWER DISTRICTS

	At October 31, 1935		At October 31, 1936					
			Miles of primary line			Number of Consumers		
	Miles of primary line constructed	Number of consumers receiving service	Constructed	Under construction or authorized	Total	Receiving service	Authorized	Total
NIAGARA SYSTEM	7,019.42	47,869	7,470.37	108.16	7,578.53	51,110	410	51,520
GEORGIAN BAY SYSTEM								
Severn district	312.14	2,943	374.89	12.35	387.24	3,441	37	3,478
Eugenia district	222.65	1,129	255.25	0	255.25	1,344	0	1,344
Wasdell district	238.69	1,633	251.27	0.12	251.39	1,792	4	1,796
Muskoka district	127.37	763	149.89	7.75	157.64	897	17	914
Bala district	41.27	260	46.06	0.66	46.72	293	2	295
Minden R.P.D.	0	0	2.61	0	2.61	39	0	39
EASTERN ONTARIO SYSTEM								
Central district	1,081.39	7,495	1,186.95	28.24	1,215.19	8,235	98	8,333
St. Lawrence district	405.01	2,494	431.59	7.65	439.24	2,726	17	2,743
Rideau district	92.18	537	96.34	0.20	96.54	581	2	583
Madawaska district	15.21	122	34.79	1.20	35.99	268	3	271
Ottawa district	185.79	1,197	197.81	1.16	198.97	1,278	4	1,282
THUNDER BAY SYSTEM	81.35	315	82.73	3.20	85.93	346	10	356
NORTHERN ONTARIO PROPERTIES								
Nipissing district	18.12	426	19.37	0	19.37	471	0	471
Manitoulin district	37.25	176	37.25	0	37.25	189	0	189
Total	9,877.84	67,359	10,637.17	170.69	10,807.86	73,010	604	73,614

DETAILS OF CONSTRUCTION IN RURAL POWER DISTRICTS

Rural power district	Property number	At October 31, 1935		At October 31, 1936	
		Miles of primary line constructed	Number of consumers receiving service	Miles of primary line constructed	Number of consumers receiving service
NIAGARA SYSTEM					
Acton	N5D1	9.39	28	11.02	32
Ailsa Craig	N4D7	5.59	16	5.59	17
Alvinston	N18D9	4.50	9	4.80	9
Amherstburg	N15D3	67.61	609	73.55	648
Aylmer	N11D2	118.43	675	133.93	751
Ayr	N12D4	23.76	91	27.26	104
Baden	N7D1	100.73	471	115.50	535
Beamsville	N44D3	168.83	1,610	179.72	1,660
Belle River	N15D2	43.83	378	45.95	403
Blenheim	N14D3	61.24	332	67.86	361
Bond Lake	N3D3	173.41	1,716	182.76	1,846
Bothwell	N14D10	39.39	148	41.72	165
Brampton	N13D2	54.83	177	60.54	191
Brant	N12D1	115.19	614	122.91	676
Brigden	N18D8	36.91	121	37.24	123
Burford	N12D2	53.50	282	55.57	299
Caledonia	N2D5	105.67	546	112.72	607
Chatham	N14D1	150.52	858	166.19	898
Chippawa	N1D7	28.20	188	29.86	202
Clinton	N8D11	70.53	383	70.61	404
Delaware	N4D3	143.20	697	145.37	718
Dorchester	N4D4	113.30	622	119.76	655
Dresden	N14D12	24.58	77	28.89	86
Drumbo	N12D5	60.35	274	62.84	297
Dundas	N2D1	117.44	781	136.22	859
Dunnville	N1D9	19.55	114	20.85	129
Dutton	N11D3	47.40	181	50.82	199
Elmira	N7D3	25.25	91	26.05	99
Elora	N5D4	48.21	270	53.41	284
Essex	N15D7	90.05	464	95.58	496
Exeter	N4D6	69.62	680	70.20	712
Forest	N18D6	44.13	164	51.95	205
Galt	N6D2	40.93	341	41.08	353
Georgetown	N5D2	58.06	281	60.67	296
Goderich	N8D2	50.69	195	51.27	209
Grantham	N44D1	65.53	861	63.65	889
Guelph	N5D3	99.27	605	106.44	643
Haldimand	N2D8	69.26	330	88.40	395
Harriston	N8D5	23.75	61	24.05	64
Harrow	N15D4	68.58	661	71.48	694
Ingersoll	N10D3	183.55	632	187.02	649
Jordan	N44D2	39.99	414	44.22	428
Keswick	N3D5	58.30	1,125	64.43	1,202
Kingsville	N15D5	137.95	1,460	143.05	1,531
Listowel	N8D8	82.13	356	82.35	368

DETAILS OF CONSTRUCTION IN RURAL POWER DISTRICTS—Continued

Rural power district	Property number	At October 31, 1935		At October 31, 1936	
		Miles of primary line constructed	Number of consumers receiving service	Miles of primary line constructed	Number of consumers receiving service
NIAGARA SYSTEM—Concluded					
London	N4D2	200.08	2,278	206.50	2,386
Lucan	N4D5	42.92	146	43.33	149
Lynden	N2D2	58.48	250	66.60	266
Markham	N3D1	129.80	976	136.88	1,055
Merlin	N14D15	96.61	344	98.25	368
Milton	N13D3	70.26	354	77.48	372
Milverton	N8D9	41.46	179	49.69	202
Mitchell	N8D7	69.81	354	70.11	365
Newmarket	N3D4	69.33	403	80.23	461
Niagara	N1D1	51.15	326	51.77	336
Norwich	N10D1	116.09	522	133.64	605
Oil Springs	N18D3	21.14	115	21.14	115
Palmerston	N8D6	38.56	115	39.14	121
Petrolia	N18D5	14.98	64	18.31	80
Preston	N6D1	152.50	1,199	156.39	1,189
Ridgetown	N14D2	106.58	716	108.66	739
St. Jacobs	N7D2	71.34	391	72.09	409
St. Marys	N9D1	120.24	446	127.44	479
St. Thomas	N11D1	171.07	1,165	174.72	1,218
Saltfleet	N17D1	96.21	1,670	99.05	1,747
Sandwich	N15D1	130.76	2,035	132.04	2,068
Sarnia	N18D4	89.14	1,274	89.80	1,375
Scarboro	N3D2	91.53	885	95.93	1,011
Seaforth	N8D10	17.56	152	17.56	156
Simcoe	N12D6	75.08	396	83.13	462
Stamford	N44D4	8.77	305	8.77	303
Stratford	N8D4	37.17	234	37.77	238
Strathroy	N4D4	80.21	235	84.80	256
Streetsville	N13D1	107.62	478	111.15	509
Tavistock	N8D1	93.16	330	97.52	356
Thamesville	N14D11	69.64	279	73.43	294
Tilbury	N14D14	76.77	301	95.43	359
Tillsonburg	N10D4	121.27	630	138.53	703
Wallaceburg	N14D13	98.52	596	106.24	646
Walsingham	N12D7	135.00	607	154.47	759
Walton	N8D3	45.10	274	47.78	292
Waterdown	N2D3	71.46	989	72.48	1,014
Waterford	N12D3	72.97	325	82.38	351
Watford	N18D7	17.55	57	17.55	58
Welland	N1D5	285.61	2,790	287.70	2,917
Woodbridge	N16D1	212.72	1,086	230.42	1,193
Woodstock	N10D2	130.07	689	138.72	737

DETAILS OF CONSTRUCTION IN RURAL POWER DISTRICTS—Continued

Rural power district	Property number	At October 31, 1935		At October 31, 1936	
		Miles of primary line constructed	Number of consumers receiving service	Miles of primary line constructed	Number of consumers receiving service
GEORGIAN BAY SYSTEM					
Severn District					
Alliston	S32D1	24.52	148	24.72	157
Barrie	S4D1	61.70	513	77.06	610
Beeton	S33D1	1.80	5	1.80	5
Bradford	S37D1	27.07	85	27.17	91
Buckskin	S24D1	1.20	15	1.75	22
Cookstown	S35D1	0.50	2	0.90	3
Creemore	S10D2	30.12	121	30.12	128
Elmvale	S7D1	26.25	157	26.25	160
Hawkestone	S9D1	29.80	202	36.55	241
Innisfil	S31D1	36.46	656	41.24	728
Medonte	S18D1	9.44	57	23.30	112
Midland	S1D1	28.50	141	48.75	275
Nottawasaga	S5D1	8.22	100	8.22	100
Thornton	S36D1	8.00	32	8.00	31
Tottenham	S34D1	0.00	00	0.30	1
Wasaga Beach	S10D1	18.56	709	18.76	777
Eugenia District					
Arthur	E13D2	2.40	10	2.40	10
Bruce	E19D1	62.47	279	62.65	311
Chatsworth	E3D1	0.00	22	0.00	22
Dundalk	E5D1	0.00	0	4.05	21
Flesherton	E1D1	2.60	38	2.60	27
Holstein	E7D1	0.50	8	0.50	8
Lucknow	E24D1	0.11	2	0.11	2
Markdale	E1D1	20.70	89	20.85	87
Meaford	E14D1	1.00	5	6.39	34
Neustadt	E8D1	0.50	4	0.76	6
Orangeville	E12D1	23.28	82	23.73	86
Owen Sound	E2D1	12.68	61	20.54	112
Ripley	E24D2	4.32	13	4.92	15
Sauble	E46D1	11.45	66	13.75	91
Shelburne	E10D1	18.44	51	18.44	54
Tara	E15D1	25.75	112	36.75	160
Wroxeter	E22D1	36.45	290	36.81	298
Wasdell District					
Beaverton	W2D1	30.76	366	32.41	398
Cannington	W3D1	10.09	53	10.09	53
Mariposa	W9D1	49.39	324	50.50	336
Port Perry	W12D1	51.66	402	53.06	426
Sparrow Lake	W1D1	34.64	279	39.49	360
Uxbridge	W11D1	62.15	209	65.72	219
Muskoka District					
Beaumaris	M7D1	36.84	305	45.25	353
Baysville	M10D1	32.35	172	32.55	182
Gravenhurst	M4D1	3.04	23	5.64	29
Huntsville	M2D1	33.39	130	39.05	168
Utterson	M8D1	21.75	133	27.40	165
Bala District					
Bala	GB13D1	41.27	260	46.06	293
Minden	G37D1	0	0	2.61	39

DETAILS OF CONSTRUCTION IN RURAL POWER DISTRICTS—Continued

Rural power district	Property number	At October 31, 1935		At October 31, 1936	
		Miles of primary line constructed	Number of consumers receiving service	Miles of primary line constructed	Number of consumers receiving service
EASTERN ONTARIO SYSTEM					
CENTRAL ONTARIO DISTRICT					
Belleville	C38D1	86.05	710	93.33	735
Bowmanville	C23D1	34.22	149	35.17	164
Brighton	C6D1	11.55	68	12.63	71
Campbellford	C11D1	22.29	82	22.69	86
Cobourg	C13D1	105.85	506	116.68	560
Colborne	C7D1	38.28	218	40.38	230
Fenelon Falls*	C30D1	33.10	186	61.46	385
Kingston	C44D1	138.54	810	156.18	965
Lakefield	C18D1	28.94	110	29.49	126
Marmora	C47D1	0	0	3.25	17
Millbrook	C25D1	21.93	134	22.26	140
Napanee	C43D1	112.10	553	120.89	613
Newcastle	C22D1	30.45	132	30.45	137
Norwood	C31D1	8.03	65	13.46	69
Oshawa	C24D1	129.86	1,682	142.84	1,798
Omemee	C26D1	5.22	8	5.22	10
Peterborough	C20D1	66.93	1,155	71.24	1,214
Stirling	C35D1	27.81	115	27.81	117
Trenton	C3D1	45.99	217	62.46	279
Warkworth	C49D1	0.77	8	0.77	10
Wellington	C45D1	111.65	431	118.29	509
ST. LAWRENCE DISTRICT					
Alexandria	L15D1	20.40	107	20.68	116
Brockville	L3D1	99.36	685	99.36	718
Chesterville	L5D1	52.14	369	58.89	427
Iroquois	L9D1	91.16	461	90.96	472
Martintown	L13D1	24.29	147	25.82	166
Maxville	L14D2	62.64	411	66.22	433
Prescott	L2D1	37.07	202	37.16	215
Williamsburg	L7D1	17.95	112	32.50	179
RIDEAU DISTRICT					
Carleton Place	H5D1	0.50	1	0.50	1
Kemptville	H9D1	5.43	47	5.43	51
Perth	H2D1	16.11	82	17.43	87
Smiths Falls	H3D1	70.14	407	72.98	442
MADAWASKA DISTRICT					
Arnprior	QM10D1	5.72	59	5.72	68
Renfrew	QM16D1	9.49	63	29.07	200
OTTAWA DISTRICT					
Nepean	T1D1	185.79	1,197	197.81	1,278
THUNDER BAY SYSTEM					
Fort William	P10D1	51.53	182	52.40	197
Port Arthur	P2D1	29.82	133	30.33	149

*Includes 21.83 miles and 156 consumers transferred from Lindsay R.P.D., Nov. 1, 1935.

DETAILS OF CONSTRUCTION IN RURAL POWER DISTRICTS—Concluded

Rural power district	Property number	At October 31, 1935		At October 31, 1936	
		Miles of primary line constructed	Number of consumers receiving service	Miles of primary line constructed	Number of consumers receiving service
MANITOULIN RURAL POWER DISTRICT					
Manitoulin	FM1D1	37.25	176	37.25	189
NORTHERN ONTARIO PROPERTIES					
NIPISSING DISTRICT					
North Bay	Z4D1	14.87	411	15.27	452
Powassan	Z8D1	3.25	15	4.10	19

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PROVINCIAL AUDITOR'S REPORT

1935-36

Prepared pursuant to the provisions of an Order-in-Council dated
the 28th day of October, 1909

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 27

ONTARIO

TORONTO
Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty
1937

To THE HONOURABLE HERBERT ALEXANDER BRUCE, M. D.,
R.A.M.C., F.R.C.S. (Eng.),

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to Your Honour the Report of the Provincial Auditor pursuant to the provisions of R. S. O. 1927, chap. 25, sec. 13, subsec. 2, of the Audit Act.

Respectfully submitted,

MITCHELL F. HEPBURN,
Treasurer of Ontario.

Treasury Department, Ontario,
Toronto, January 15th, 1937.

PROVINCIAL AUDITOR'S OFFICE,

Toronto, January 15th, 1937.

HON. MITCHELL F. HEPBURN,
Treasurer of Ontario.

SIR: I have the honour to submit for the information of the Legislative Assembly, pursuant to the provisions of an Order-in-Council dated 28th October, 1909, as provided by R.S.O. 1927, chap. 25, subsection 2 of section 31, and pursuant to the provisions of subsection 2 of section 13, and sections 27 and 28 of the Audit Act:

(A) Introduction and Miscellaneous Statements.
(B) Legal Opinions.
(C) Statement of Treasury Board Minutes.
(D) Statement of Special Warrants.

Respectfully submitted,

G. A. BROWN,
Provincial Auditor.

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A

INTRODUCTION AND MISCELLANEOUS STATEMENTS

Report of the Provincial Auditor

INTRODUCTION

I have the honour to submit my report for the fiscal year ended March 31st, 1936, pursuant to the provisions of the Audit Act, R. S. O. 1927, chapter 25, section 13, sub-section 2. and sections 27 and 28.

PUBLIC ACCOUNTS

The Public Accounts for the fiscal year 1935-36 (April 1st. 1935. to March 31st, 1936) were printed and available for distribution the first week in September, 1936, and by direction of the Prime Minister each Member of the Legislature was provided with a copy.

The only change in the make-up of the accounts is in the placing of the Departments in alphabetical order. commencing with Agriculture Department. (See Table of Contents, page 4).

AUDIT OF REVENUE

Reports on all audits conducted during the fiscal year were submitted to the head of each Department concerned. bearing necessary criticisms in connection with accounting methods and recommendations for improvements.

In most cases continued improvement is shown in the manner of Revenue accounting. and no doubt further improvement will continue to be shown.

The ordinary Revenue for the year 1935-36 amounted to $65.726,984.57, derived from the following sources:

Dominion Government—		
Annual Subsidy	$2.941.424 28	
Interest—Common School Fund	72.810 31	
		$3.014.234 59
Revenue Derived from Individuals and Corporations Receiving the Benefit of Provincial Services, Special Privileges or the Use of Natural Resources and Properties and Profits from Trading, Etc.:		
Taxation	$39.337.210 95	
Gasoline, Mines. Lands. Corporations, Race Tracks (betting). Amusements. Stock Transfers. Succession Duties and Wine.		
Royalties, Duties and Dues	2.213.473 34	
Bonus and Timber. Sand and Gravel. Game and Fish.		
Licenses and Permits	10.210.502 80	
Motor Vehicles. Liquor Permits. Hunting and Fishing. Insurance, Loan and Trust Companies, Mines. Theatres, etc.		
Fees	1.695.301 94	
Local Registrars. Police Magistrates. Crown Attorneys. etc.; Mine Recording. Companies and Brokers' Registration, etc.; Land Transfers. Motor Vehicle Transfers, etc.		
Fines and Penalties	124.682 95	
Profits from Trading Activities	8.010.000 00	
Liquor Control Board—Profits. Fines. Sales of Confiscated Liquor. etc.		
Interest on Drainage and Sundry Loans	162.300 95	
Agriculture and Public Domain	620.346 03	
Repayments—Highways	213.934 26	
Miscellaneous	124.996 76	
Ontario Gazette. sale of Government Publications. and Casual Revenue.		
		62.712.749 98
		$65.726.984 57

ORDINARY REVENUE AND EXPENDITURE

Ordinary Revenue	$65,726,984 57
Ordinary Expenditure (before providing for Unemployment Direct Relief)	57,256,322 11
Surplus (before providing for Unemployment Relief)	8,470,662 46
Less—Unemployment Direct Relief and Administration thereof	21,813.368 20
Deficit for Fiscal Year ended March 31st. 1936	$13,342,705 74

GROSS PROVINCIAL DEBT

Statement Showing Increase

For the Fiscal Year Ended March 31st, 1936

	1934 $ c.	1935 $ c.	1936 $ c.	Increase 1936 over 1935 $ c.
FUNDED DEBT—				
Stocks, Debentures, Certificates and Annuities	594.038,788 49	587,191,342 46	594,112,954 50	6,921,612 04
UNFUNDED DEBT	61,722,064 21	87,194,574 52	95,445,559 26	8,250,984 74
Gross Debt	655,760.852 70	674,385.916 98	689,558.513 76	15,172,596 78

INCREASE IN GROSS DEBT ACCOUNTED FOR THUS—

CAPITAL EXPENDITURES—		
Expenditures on Highways, Northern Development, Public Buildings and Works, etc.	$ 11,396.275 44	
Unemployment Relief—		
Municipal and Public Works	5,390,164 40	
	$ 16,786,439 84	
Less—Capital Revenue	1,928.717 32	
		$ 14,857,722 52
DEFFERED ASSETS—Increase		513,849 20
DISCOUNT OR PREMIUM ON DEBENTURES ISSUED OR PURCHASED DURING YEAR		763.629 60
CASH IN BANKS (including Home Bank)—Increase		5.517,974 44
DEFICIT OF ORDINARY REVENUE		13,342,705 74
		$ 34,995,881 50
Deduct:		
DISCOUNT ON DEBENTURES, ETC., WRITTEN OFF	$ 814,908 39	
RAILWAY AID CERTIFICATES WRITTEN OFF	108,749 90	
SINKING FUNDS—Earnings and Instalments	1.017,488 06	
LOANS TO MUNICIPALITIES, ETC.—Decrease	470,228 49	
PENSIONS, MOTHERS' ALLOWANCES AND UNEMPLOYMENT RELIEF—Due to Province—Decrease	614.536 63	
ADVANCES TO HYDRO-ELECTRIC POWER COMMISSION—Decrease	15,142,684 52	
ADVANCES TO TEMISKAMING AND NORTHERN ONTARIO RAILWAY—Decrease	800,000 00	
AGRICULTURAL DEVELOPMENT FINANCE ACT—Investments—Decrease	849,553 97	
MISCELLANEOUS LOANS AND ADVANCES—Decrease	19,440 69	
	$ 19,837,590 65	
BOOK ENTRIES—		
Less—		
Increase in accrued liabilities as at March 31st, 1936, included in Unfunded Debt—		
Accrued interest on Public Debt, Special Funds. etc.	14.305 93	
		19,823,284 72
		$ 15.172.596 78

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Advances by the Province to March 31st, 1936

Advanced on Capital Account to March 31st. 1935		$207,298,850 36
Deduct—		
Refund of Temporary Advances made on Capital Account		296,100 00
Total Advances to date		$207,002,750 36
Repayments—		
Repayments from Sinking Fund in accordance with Debt Retirement Plan (1926)—		
To March 31st, 1935	$ 19,421,015 06	
For Fiscal Year ended March 31st, 1936	2,410,683 65	
	$ 21.831.698 71	
Repayment by the Commission of its share of Debenture Loans matured during the Fiscal Year 1936, which were originally issued for Hydro and other Provincial purposes	12,435,900 87	
		34.267,599 58
Net Advances to March 31st, 1936		$172,735,150 78

AGRICULTURAL DEVELOPMENT FINANCE ACT

R. S. O. 1927, Cap. 67

Statement Showing Deposits in Province of Ontario Savings Offices, and Agricultural Loans as at March 31st, 1936

DEPOSITS IN SAVINGS OFFICES BY PUBLIC AT MARCH 31ST, 1936		$ 32.015,817 76
AGRICULTURAL DEVELOPMENT FINANCE ACT—INVESTMENTS—		
Agricultural Development Board—Debentures	$ 62.288.000 00	
Less: Repayments to date	13,788,000 00	
	$ 48.500.000 00	
Accrued Interest on debentures	5.953.667 59	
		$ 54,453,667 59
Farm Loans Act—Farm Loan Associations		175,728 76
Farm Loans Act—Capital Stock in Associations		2,445 00
		$ 54,631,841 35
Savings Offices—		
Cash on hand and in banks	$ 954.284 77	
Accounts receivable	4.630 99	
Fixtures (depreciated value)	64.446 50	
		1.023.362 26
		$ 55,655,203 61

SUMMARY

Debentures, Cash, Etc	$ 49.701,536 02
Accrued Interest on Debentures	5.953,667 59
	$ 55.655.203 61

PUBLIC SERVICE SUPERANNUATION FUND

R.S.O. 1927, Cap. 16, Part III

As at March 31st, 1936

Balance at credit of Fund—April 1st, 1935				$4,749,683 10
Receipts and Payments for the year ended March 31st, 1936.				
Contributions—				
Employees			$ 369,512 35	
Boards, Commissions, etc. (Sec. 39)		$ 43,426 25		
Less Refunds (Sec. 36)		23,610 64		
			19,815 61	
Government (Sec. 39)		$326,086 10		
(Sec. 60)		24,235 24		
		$350,321 34		
Less Refunds (Sec. 36)		117,132 87		
			233,188 47	
			$ 622,516 43	
Earnings—				
Interest—On balance at credit of Fund at April 1st, 1935:				
$4,500,000 00 for 1 year @ 4¾%		$213,750 00		
249,683 10 for 1 year @ 5 %		12,484 15		
		$226,234 15		
On contributions.				
Employees	$ 8,365 56			
Government	8,365 56			
		16,731 12		
		$242,965 27		
Less—Interest deducted on account of payments to beneficiaries, etc.		18,627 87		
			224,337 40	
				846,853 83
				$5,596,536 93
Payments—				
Allowances to beneficiaries, etc.			$ 651,938 74	
Refunds and interest			163,502 46	
				815,441 20
Balance at Credit of Fund, March 31st, 1936				$4,781,095 73

INVESTMENT OF FUND

Province of Ontario Debentures—4¾% due October 31st, 1953	$4,500,000 00
Funds uninvested—on deposit with the Treasurer of Ontario	281,095 73
	$4,781,095 73

Statement showing the remuneration paid to Officials in the Parliament Buildings who received pay from more than one source during the Fiscal Year 1935-36

Name	Page Pub. Acc.	Amount	Total
DEPARTMENT OF ATTORNEY-GENERAL:		$ c.	$ c.
Humphries, I. A.	B 7	6,318 15	
"	B 31	825 07	
			7,143 22
DEPARTMENT OF EDUCATION:			
Amoss, H. E.	C 23	4,287 83	
"	C 22	320 00	
			4,607 83
Beattie, L. S.	C 40	3,901 90	
"	C 22	320 00	
			4,221 90
Beecroft, W. A.	C 27	2.936 88	
"	C 27	28 00	
"	C 28	150 00	
			3,114 88
Beneteau, A. J.	C 23	4,866 92	
"	C 27	94 00	
"	C 28	300 00	
			5,260 92
Campbell, J. D.	C 23	4,094 88	
"	C 27	76 00	
			4,170 88
Cowles, J. P.	C 27	4,480 90	
"	C 28	500 00	
			4,980 90
Davies, N.	C 40	3,708 83	
"	C 22	320 00	
"	C 27	21 50	
"	C 28	90 00	
			4,140 33
DeLaporte, L. H.	C 23	2.498 73	
"	C 22	240 00	
			2,738 73
Fleming, W. J.	C 18	1,669 73	
"	C 19	28 00	
			1,697 73
Greer, V. K.	C 23	5.249 40	
"	C 27	80 00	
			5,329 40
Hamill, A. M.	C 40	3.515 88	
"	C 22	240 00	
"	C 27	60 00	
			3.815 88
Hoag, J. P.	C 23	3,214 40	
"	C 24	705 50	
"	C 27	378 00	
"	C 28	300 00	
			4,597 90
Hooper, A. G.	C 38	4.480 90	
"	C 28	500 00	
			4,980 90
Husband, A. J.	C 38	4,480 90	
"	C 28	500 00	
			4,980 90
Jennings, W. A.	C 38	4.480 90	
"	C 27	456 00	
			4,936 90
Karr, W. J.	C 23	3,633 75	
"	C 28	1.233 17	
"	C 27	57 00	
"	C 28	300 00	
			5,223 92

Statement showing the remuneration paid to Officials in the Parliament Buildings who received pay from more than one source during the Fiscal Year 1935-36—Continued

Name	Page Pub. Acc.	Amount	Total
		$ c.	$ c.
Kerfoot, H. W.	C 28	4,287 83	
"	C 27	430 00	
			4,717 83
MacDougall, J. B.	C 24	4.094 88	
"	C 27	80.00	
			4,174 88
McKay, A.	C 18	1,474 14	
"	C 19	78 00	
			1,552 14
Moon, A. M.	C 40	3,708 83	
"	C 27	230 00	
			3,938 83
Patterson, R. A.	C 24	1.474 14	
"	C 22	60 00	
			1.534 14
Rendall, S. D.	C 24	3.901 90	
"	C 22	240 00	
			4,141 90
Rutherford, F. S.	C 40	4.480 90	
	C 27	607 50	
			5,088 40
Sloman, F. G.	C 19	1.767 54	
"	C 19	86 50	
			1,854 04
Walton, G.	C 12	1,963 13	
"	C 13	70 72	
			2,033 85
Walker, D.	C 28	2.167 47	
"	C 27	123 00	
"	C 28	800 00	
			3,090 47
DEPARTMENT OF HEALTH:			
Bates, J. E.	E 18	3.515 88	
"	E 19	38 40	
			3,554 28
Berry, A. E.	E 17	4.094 88	
"	C 22	60 00	
			4.154 88
Brydson, L.	E 18	1.033 92	
"	E 19	80 44	
			1,114 36
Buchanan, J.	E 18	1.180 65	
"	E 19	75 80	
			1.256 45
Fenton, W.	E 18	1.571 92	
"	E 19	69 95	
			1.641 87
Haynes, E.	E 18	738 75	
"	E 19	83 29	
			822 04
Jewell, E.	E 18	1.474 14	
"	E 19	83 84	
			1,557 98
MacNabb, A. L.	E 18	4.094 88	
"	E 19	21 12	
			4,116 00
McClure, A. D.	E 18	2.060 49	
"	E 19	11 64	
			2,072 13
McClure, W. B.	E 18	2.644 74	
"	E 19	13 58	
			2,658 32

Statement showing the remuneration paid to Officials in the Parliament Buildings who received pay from more than one source during the Fiscal Year 1935-36—Continued

Name	Page Pub. Acc.	Amount	Total
		$ c.	$ c.
Myers, C. R.	E 22	1,200 00	
"	C 22	48 00	
			1,248 00
Murphy, W.	E 18	738 75	
"	E 19	69 32	
			808 07
Owen, O.	E 18	1,180 65	
"	E 19	94 80	
			1,275 45
Packham, R.	E 18	1,571 92	
"	E 19	68 99	
			1,640 91
Phair, J. T.	E 11	1,571 92	
"	E 12	2,845 93	
"	C 22	320 00	
			4,737 85
Power, M.	E 21	2,498 73	
"	C 22	120 00	
			2,618 73
Vrooman, L.	E 12	1,474 14	
"	C 22	240 00	
			1,714 14
Tuft, F.	E 18	812 67	
"	E 19	12 74	
			825 41
DEPARTMENT OF MUNICIPAL AFFAIRS:			
Cummings, H. L.	M 3	4,480 90	
"	M 4	959 77	
			5,440 67
DEPARTMENT OF PRIME MINISTER:			
Petley, H.	O 6	1,767 54	
"	J 3	200 00	
			1,967 54
DEPARTMENT OF PROVINCIAL SECRETARY:			
Venables, A. E.	Q 6	1,571 92	
"	E 14	572 76	
"	J 3	25 00	
"	O 4	27 00	
			2,196 68

STATEMENT SHOWING AMOUNT EXPENDED ON ROAD CONSTRUCTION IN ONTARIO FROM COMMENCEMENT OF GOOD ROADS SYSTEM, 1903; COLONIZATION ROADS, 1903; NORTHERN DEVELOPMENT ACT, 1912, AND PROVINCIAL HIGHWAYS ACT, 1917

Year	The Highway Improvement Act, Chap. 54, R.S.O. 1927							Colonization Roads	Roads in Northern Ontario	Year
	Provincial	County	Township	Object Lesson	Conn. Links	T. & H. Highy.	Indian Res.			
1903-19	1,506,000 00	3,887,080 06		125,760 41				$5,578,865 11	5,760,181 71	1903-19
1920	4,450,000 00	2,623,719 34		33,730 27	$2,900 00			451,808 59	1,241,405 90	1920
1921	9,925,022 95	3,635,267 34	$326,668 81	5,000 00	16,622 10			506,180 80	1,409,126 19	1921
1922	12,050,000 00	5,110,217 49	701,349 61		167,615 08	$17,272 62		671,184 48	1,694,889 56	1922
1923	16,897,172 79	4,257,871 34	669,483 05		169,631 26	11,349 44		827,855 98	2,688,151 48	1923
1924	6,600,000 00	3,418,059 04	613,860 54		40,523 00	22,472 92		447,444 66	2,949,239 56	1924
1925	8,350,000 00	3,213,783 60	638,803 11		53,575 42	123,670 07		474,409 34	3,381,301 86	1925
1926	6,750,000 00	3,222,099 91	988,118 04		75,224 28		$6,870 69	296,317 27	3,736,612 01	1926
1927	9,150,000 00	2,878,724 81	1,319,173 80		32,782 10		1,714 73	498,188 75	3,943,361 77	1927
1928	11,650,000 00	3,740,443 99	1,602,547 95		1,022 20		13,459 92	359,383 68	3,830,647 42	1928
1929	12,450,000 00	4,359,577 69	1,794,950 66		166,925 22		24,203 11	405,364 91	4,943,462 70	1929
1930	13,875,000 00	4,590,367 00	2,131,211 67		85,419 31		25,520 34	600,626 77	7,200,962 50	1930
1931	12,670,000 00	4,417,696 10	2,309,576 36		40,854 13		29,603 14	497,265 93	8,776,122 79	1931
1932	7,750,000 00	3,670,334 72	1,877,405 55		46,578 14		13,245 01	443,623 76	15,187,839 16	1932
1933	5,200,000 00	2,105,893 72	1,377,640 28		14,443 28		14,334 75	304,684 54	5,875,537 01	1933
1934	12,697,555 97	1,463,519 72	1,000,058 41		35,235 57		14,856 13	223,611 80	23,637,867 89	1934
1935	2,374,878 42	1,266,757 97	608,564 43		21,219 50		13,520 46	152,033 86	10,091,247 64	1935
1936	4,443,970 74	1,834,186 56	1,275,249 60		4,395 72		5,658 31	326,192 16	17,529,908 42	1936
	$158,789,600 87	$59,695,601 03	$19,234,666 87	$164,490 68	$974,966 31	$174,765 05	$162,986 59	$13,065,242 39	$123,877,865 57	

SUMMARY OF EXPENDITURE

The Highway Improvement Act:	Capital	Ordinary
Provincial Highways	$131,856,246 50	$26,933,354 37
County Roads	40,783,002 07	18,912,598 96
Township Roads	8,006,753 51	11,227,913 36
Object Lesson Roads	164,490 68	
Connecting Links	943,115 03	31,851 28
Toronto and Hamilton Highway Commission	94,168 46	80,596 59
Indian Reserve	81,548 32	81,438 27
	$181,929,324 57	$57,267,752 83
Colonization Roads	7,849,478 81	5,215,763 58
Roads in Northern Ontario	99,635,163 75	24,242,701 82
	$289,413,967 13	$86,726,218 23

SUMMARY OF REPAYMENTS

Year	Repayments	Subsidy	Total
1918	$5,251 57		$5,251 57
1919	14,733 64		14,733 64
1920	78,261 82		78,261 82
1921	654,277 00	$1,315,633 67	1,969,910 67
1922	1,561,149 44	2,058,613 62	3,619,763 06
1923	988,454 00	705,048 24	1,693,502 24
1924	2,834,155 43	839,303 48	3,673,458 91
1925	5,067,807 75	865,414 90	5,933,222 65
1926	1,977,814 99	50,000 00	2,027,814 99
1927	1,572,671 18	53,269 37	1,625,940 55
1928	1,950,806 64		1,950,806 64
1929	2,172,153 18		2,172,153 18
1930	3,547,715 81		3,547,715 81
1931	4,308,316 80		4,308,316 80
1932	8,366,401 33		8,366,401 33
1933	2,755,754 87		2,755,754 87
1934	3,493,850 90		3,493,850 90
1935	660,818 26		660,818 26
1936	6,043,090 58		6,043,090 58
	$48,053,485 19	$ 5,887,283 28	$53,940,768 47

RECAPITULATION

	Capital	Ordinary	Total
Expenditure	$289,413,967 13	$86,726,218 23	$376,140,185 36
Repayments	42,772,205 66	11,168,562 81	53,940,768 47
Total Expenditure	$246,641,761 47	$75,557,655 42	$322,199,416 89

G. A. BROWN,
Provincial Auditor.

B

LEGAL OPINIONS

Re Municipal Tax Arrears

PROVINCIAL AUDITOR'S OFFICE

Toronto. May 17th, 1935.

MR. I. A. HUMPHRIES, K.C.,
Deputy Attorney General.

Dear Mr. Humphries:

Section 9 of the Assessment Amendment Act 1934, 24 Geo. V, chap. 1, upon which you gave me a ruling on September 29th, 1934, has been repealed at the last session of the Legislature (Bill 115) so that the section now reads:

> (1) "Irrespective of and in addition to any percentage charge imposed under the provisions of section 111, in every municipality the treasurer or the collector, if the rolls are unreturned, shall add to the amount of all taxes due and unpaid interest at the rate of one-half of one per centum per calendar month or fraction thereof from the 31st day of December in the year in which such taxes are levied until such taxes are paid."
>
> (2) "No interest or percentage added to taxes shall be compounded."
>
> (3) "Interest and percentages added to taxes shall form part of such taxes and be collected as taxes."

I have again been requested to obtain a ruling as to whether the 1935 amendment may be construed as being retroactive.

I would very much appreciate your giving me a ruling at your earliest opportunity.

Yours very truly,

G. A. BROWN.
Provincial Auditor.

DEPARTMENT OF ATTORNEY GENERAL

Toronto 5, May 28th, 1935.

G. A. BROWN, ESQUIRE.
Provincial Auditor.
Buildings.

Re The Assessment Amendment Act

Dear Mr. Brown:

Replying to your letter of the 17th of May, I have discussed this with Mr. Cummings, and he has forwarded to me a memorandum, a copy of which I enclose, for your information,— and which I think will answer your inquiry.

Yours very truly,

I. A. HUMPHRIES.
Deputy Attorney General.

DEPARTMENT OF MUNICIPAL AFFAIRS

Toronto, May 23rd, 1935.

I. A. HUMPHRIES, ESQUIRE, K.C.,
Deputy Attorney General.

Re Municipal Tax Arrears

Dear Sir:

Referring to your memorandum to me of the undated instant, enclosing letter from the Provincial Auditor, I may say that I am preparing a bulletin to send out to all municipalities explaining the amendment.

In my opinion, the amendment of 1935 which rewrote section 143 of The Assessment Act applies to all taxes which are in arrears and outstanding for 1934 and previous years, and the only penalty, in addition to bylaw penalties previously imposed, which now can be demanded and collected of any taxpayer is the statutory penalty of interest at the rate of ½ of 1 per cent. per calendar month, or fraction thereof, from the 31st day of December in the year in which the taxes owing were levied.

In other words, if the tax payer still owes, we will say, $100 for taxes levied in 1932 and the by-law penalty of (say) 5 per cent. was added in that year, then the amount which is due from such taxpayer is $105 plus interest for 1933 and 1934 and at the time of writing for five month of 1935, or, in other words, a total interest charge of 14½ per cent., making the total amount due $119.50.

I return the letter of the Provincial Auditor to you.

HERBERT L. CUMMINGS,
Deputy Minister.

Re Payments Out of Assurance Fund

PROVINCIAL AUDITOR'S OFFICE

Toronto, November 22nd, 1935.

MR. I. A. HUMPHRIES, K.C.,
Deputy Attorney General.

Dear Mr. Humphries:

I have had handed to me two letters addressed to the Honourable M. F. Hepburn, Provincial Treasurer, from Mr. W. W. Denison, Inspector of Legal Offices in respect to certain claims which he has recommended payment thereof out of the Assurance Fund under the Land Titles Act.

Referring to Section 130, sub-section 4, of chapter 158, R. S. O. 1927, it would appear that any payments to be made out of the Assurance Fund must be upon an order of the Court or a Judge authorizing or directing the payment to be made.

In a further letter from Mr. Jos. Sedgwick to the Honourable the Minister of Mines, he has stated that the liability of the Fund is determined by the Inspector under the Act, (Col. W. W. Denison) and to avoid trouble he may be willing to recognize the claim and recommend payment.

May I ask you if you would be good enough to let me have a legal opinion as to whether payment out of the Assurance Fund may be made upon the recommendation of the Inspector of Legal Offices without complying to Section 130 of the Land Titles Act heretofore referred to necessitating a Court Order.

I am enclosing herewith the correspondence in both of these cases and would appreciate your opinion as soon as convenient.

The Department of Mines is very anxious to have the payment made to Mr. A. S. Fuller as soon as possible.

Yours very truly,

G. A. Brown,
Provincial Auditor.

Inspector of Legal Offices

Parliament Buildings, Toronto, 2.
September 28th, 1935.

The Honourable Mitchell F. Hepburn,
Treasurer of the Province of Ontario,
Parliament Buildings, Toronto.

Dear Sir:

Some years ago a small portion of land near Beaverton in Ontario County was placed under the Land Titles system. It was done probably about ten years ago, and, to my mind, it would have been better to have refused to accept this property under this system, inasmuch as no other property in the County had been accepted, and it, therefore, meant that it was necessary to appoint a Local Master of Titles, open an office, procure all the proper books, etc. After this was done and the County Judge, at that time Judge McGillivray, was appointed Local Master, he did this work fairly efficiently, but he died around 1928. His successor on the County Bench, Judge Thompson, was appointed in his place, but he never kept the books at all. He made no entries, and when I first became Inspector I reported to Colonel Price, the then Attorney General, as to how this office was being run. Later on I persuaded the Attorney General to dispense with the services of Judge Thompson, and the Registrar of Deeds for the County was appointed in his room and stead.

I find that the damage had been done, as certain documents that should have been registered against the lands, were not registered at all. I had one of the experts from the Toronto Office of the Land Titles go into this matter, and I find that a mortgage in favour of one McGarvey, which covered all the lands on the property, was never registered. Therefore, at least, two different persons bought lots in ignorance of the existence of this mortgage. The mortgage or charge was from one David M. Smith to John McGarvey, and subsequently David M. Smith conveyed one piece to Thomas J. Lough. It was, of course, conveyed subject to the mortgage, but no record of this mortgage appeared at the time. There is no doubt but that Lough has been damnified by the failure of Judge Thompson to do his work properly, and his solicitor, Mr. C. G. French, has had a great deal of correspondence with me dealing with the matter. He says that Mr. McGarvey will take $120.00 for a partial discharge, and he, Mr. C. G. French, asks $50.00 for his costs. I think this is reasonable, and would recommend the payment out of the Assurance Fund of these two amounts.

Yours truly,

W. W. Denison,
Inspector of Legal Offices.

INSPECTOR OF LEGAL OFFICES

Parliament Buildings, Toronto,2,

October 1st, 1935.

THE HONOURABLE MITCHELL F. HEPBURN.
Provincial Treasurer,
Parliament Buildings, Toronto.

Re Southeast Part of North Part of Lot 9. Concession 4.
Township of Whitney

Dear Sir:

A question has arisen in the Department of Mines regarding a claim made by Mr. A. S. Fuller for the amount of taxes paid in to the Township of Whitney, amounting to $425.60.

With regard to this, I attach the letter of Mr. Joseph Sedgwick, Solicitor of the Department, bearing date the 20th of August, 1935, and I would especially refer you to the paragraph in which he states that as claims against the Assurance Fund are few. and the liability is determined by the Inspector. and that the Inspector might be willing to recognize the claim and recommend payment.

As a matter of law it might be stated that the claimant has no recourse other than against the Assurance Fund, and as the Crown cannot be sued for the error of its servants, it is not legally responsible. This might furnish a very proper reason for the reimbursement to Mr. Fuller of the monies he paid out through error, not of his own.

I have received a further letter from Mr. Sedgwick. which is as follows:

> "Toronto 5, September 10th, 1935.
>
> Dear Col. Denison:
>
> Replying to your letter of September 5th, when I said in my memo to Mr. Leduc that as a matter of law the Patents Branch was responsible, I meant to comply with the Act a claim should first be made to them. I understand a claim has been made against them, and if they refuse to pay it, relying on their right as the Crown to disclaim responsibility for errors, then I suppose a claim against your fund could properly be entertained.
>
> Yours very truly.
>
> "J. SEDGWICK."
> *Solicitor, Attorney General's Dept.*
>
> COLONEL W. W. DENISON, K.C.,
> *Inspector of Legal Offices,*
> Parliament Buildings."

It would, therefore, seem that it would be fitting and proper for the Fund to repay Mr. A. S. Fuller the amount of $425.60, and I would accordingly recommend the payment out of the Assurance Fund. The file is at the disposal of the Treasury any time.

Yours truly,

W. W. DENISON.
Inspector of Legal Offices.

DEPARTMENT OF ATTORNEY GENERAL

Toronto 5, August 20th, 1935.

My Dear Sir:

I have been handed your file in connection with the Southeast part of the North part of Lot 9. Concession 4, Whitney Township, together with a memorandum of Mr. Sutherland to you dated August 14th, all of which I return.

Section 126 of the Land Titles Act gives to any person "wrongfully deprived of land, or of some estate of interest therein, by reason of the land being under the Land Titles Act, or by reason of some other person being registered as owner through fraud or by reason of any misdescription, omission or other error in any certificate of ownership or charge, or in any entry on the register," a right to recover what is just, by way of damages in the first instance, from the person on whose application the erroneous registration was made, or who acquired the title through the fraud or error. Subsequent sections provide for a claim against the assurance fund where the claimant is unable to recover from the person primarily responsible. On the facts set out in your memorandum it seems clear that the error was not that of the Land Titles Office, but was made by the Patents Branch of your Department, and, therefore, as a matter of law I think you are responsible, and no claim should be made against the fund.

On the other hand claims against the fund are few, the liability of the fund is determined by the Inspector under the Act (Col. W. W. Denison), and to avoid trouble he may be willing to recognize the claim and recommend payment. If it is your wish that I should communicate with Col. Denison to ascertain his views, I shall do so, but would like your instructions in view of my understanding of the Statute.

There is another side of this, which is that the taxes paid by Fuller were taxes that ought to have been paid by L. V. Bruce or his successors in interest, and I do not know whether or not your Department has considered the possibility of recovering these taxes from the person or persons who should have paid them in the first instance.

Yours very truly,

THE HONOURABLE PAUL LEDUC,
Minister of Mines.
Parliament Buildings.

JOSEPH SEDGWICK,
Solicitor, Attorney General's Dept.

DEPARTMENT OF MINES

Parliament Buildings, Toronto, Ont.,

November 15, 1935.

Dear Sir:

I understand from the office of Col. W. W. Denison, Inspector of Legal Offices, that the matter of payment of $425.60 from the Land Assurance Fund to Mr. A. S. Fuller, 19 Melinda Street, Toronto, in connection with municipal taxes paid on the Southeast part of the North part of Lot 9, Con. 4, Whitney Township, has been referred to you for consideration. This claim was first presented to Col. Denison some three months ago, and the Department is anxious that some definite action be taken.

It would be appreciated if you would kindly advise if it is your intention to admit this claim. Through inadvertence on the part of the Patents Branch the patent, which was issued, included both the mining rights and the surface rights, whereas the patent should have actually covered only the mining rights. The Department desires to secure the return of the patent from Mr. Fuller, who refuses to forward the same until he has been reimbursed for the taxes which he has paid to the municipality of the Township of Whitney, as mining rights are not subject to municipal taxation. If payment to Fuller is approved, I should be glad if you would forward the cheque to this Department so that we could make certain that the patent is returned for correction before the cheque is handed to Mr. Fuller.

Yours very truly,

T. F. SUTHERLAND,
Deputy Minister.

CHESTER WALTERS, ESQ.,
Controller of Finance.
Buildings.

ONTARIO
DEPARTMENT OF ATTORNEY GENERAL

Toronto, November 29th, 1935.

Dear Sir:

Mr. Humphries has directed me to reply to yours of the 22nd inst. in reference to file you sent him recommending payment out of the Assurance Fund under the Land Titles Act.

No doubt Mr. W. W. Denison, Inspector of Legal Offices under section 126 (4) of the Land Titles Act determines the liability of the fund for compensation, and the amount of compensation subject to appeal, but the Treasurer can only pay out that amount on the production of an Order from the Court or Judge directing the payment to be made.

I consider, therefore, that the Treasurer can only pay on receipt of this Order or certified copy thereof.

I return correspondence you sent.

Yours very truly,

P. S. GOLDING,
Solicitor, Attorney General's Dept.

G. A. BROWN, ESQ.,
Provincial Auditor,
Parliament Buildings.

Re Temporary Appointments

PROVINCIAL AUDITOR'S OFFICE

Toronto, December 31st, 1935.

MR. I. A. HUMPHRIES,
Deputy Attorney General,

Dear Mr. Humphries:

A question has arisen in connection with temporary appointments which I am submitting to you for a legal opinion.

The Public Service Act, section 8, gives a Minister power to make a temporary appointment for a period of three months, and the appointment may be extended for a further period not exceeding six months by Order-in-Council and so on from time to time.

Vote 11, item 4, in the 1935-36 Estimates, Department of Agriculture, apparently gives the Minister power to make temporary appointments without any limitation as to time.

The question therefore is: May the Minister extend a temporary appointment beyond the period of three months without an Order-in-Council for a person who has been employed and paid out of Vote 11, item 4, of the 1935-36 Estimates.

The wording in the Vote seems to conflict with section 8 of the Public Service Act.

I would very much appreciate your opinion in the matter.

Wishing you the Compliments of the Season.

Yours very truly,

G. A. Brown,
Provincial Auditor.

Department of Attorney General

Toronto 5, January 11, 1936.

Dear Mr. Brown:

I have your letter of December 31st asking if the Minister of Agriculture has power under Vote 11, Item 4, of the Main Estimates, to make temporary appointments in the Public Service for a period in excess of three months.

The Public Service Act, R. S. O. 1927, Chapter 16, Section 8, provides that the Minister may make temporary appointments for a period not exceeding three months but that such appointment may be extended by Order-in-Council for a period not exceeding six months and so on from time to time. If it were desired to give the Minister of Agriculture special powers to appoint temporary help for a period longer than the three months prescribed by section 8 of the Public Service Act, specific words would have to be used. There is nothing in Vote 11, Item 4, which gives the Minister of Agriculture powers in excess of those prescribed by section 8 of the Public Service Act, and I am, therefore, of the opinion that the Minister of Agriculture has no power to appoint temporary clerks for a period in excess of the three months period prescribed in section 8 above referred to.

Yours faithfully,

I. A. Humphries,
Deputy Attorney General.

Gordon A. Brown, Esq.,
Provincial Auditor,
Buildings.

Re Issue of Special Warrant During Adjournment of Session

Provincial Auditor's Office

Toronto, January 18th, 1936.

Mr. I. A. Humphries,
Deputy Attorney General.

Dear Mr. Humphries:

Section 13. 1 (b). makes provision for the granting of a Special Warrant when the Legislature is not in session.

May I ask if you would let me have a legal opinion as to whether a Special Warrant could be legally passed during an adjournment of a session of the Legislature.

Would you kindly let me have this opinion by Monday morning if possible?

Yours very truly,

G. A. Brown,
Provincial Auditor.

Department of Attorney General

Toronto 5, January 20, 1936.

Dear Mr. Brown:

I have your letter of January 18th asking for an opinion as to whether a special warrant can legally be passed during an adjournment of a session of the Legislature.

Under the provisions of the Audit Act, R. S. O. 1927, Chapter 25, Section 13 (1) (b) it is provided.—

> 13 (1) (b) "If, when the Legislature is not in session an accident happens to any public work or building which requires an immediate outlay for the repairs thereof, or any other occasion arises that an expenditure not foreseen or provided for by the Legislature is urgently and immediately required for the public good . . . . the Lieutenant-Governor-in-Council may order a Special Warrant to be prepared, etc."

My opinion is that the Legislature is in Session when it meets for the despatch of business until the date of its prorogation, and that therefore there is no power to issue a Special Warrant from the time of such meeting until the date of prorogation.

Yours faithfully,

C. R. Magone,
Acting Deputy Attorney General.

Gordon A. Brown, Esq.,
Provincial Auditor,
Buildings.

Re Payment of Rental of Premises Not Occupied, Game and Fisheries Department

Provincial Auditor's Office

Mr. I. A. Humphries, Toronto, January 9th, 1936.
Deputy Attorney General.

Dear Mr. Humphries:

I would very much appreciate a legal opinion from you in respect to the Province's liability to pay rent for a room in the Jackson Building, Ottawa, which was rented by the Game and Fisheries Department under a lease for twelve months from the 1st November, 1931, and was occupied during the years 1931, 1932, 1933 and to November 1st, 1934.

Since November 1st, 1934, the room has not been occupied, but the Lessor was never notified. A claim has now been made for rent from November 1st, 1934, to August 31st, 1935, plus interest.

The question I am anxious to have an opinion on, is the Province liable for rent for the period the premises were not occupied.

Correspondence and fyle enclosed herewith.

Yours very truly,

G. A. Brown.
Provincial Auditor.

Department of Attorney General

Toronto 5, January 15, 1936.

Re Account—Game and Fisheries Dept., Jackson Building, Ottawa—$414.05

Dear Mr. Brown:

I have your letter of January 9th regarding the liability of the Province to pay rent for a room in the Jackson Building, Ottawa, which was rented by the Game & Fisheries Department under lease for twelve months from the first of November, 1931, and was occupied during the years 1931, 1932, 1933 and to November 1st, 1934.

I have already given an opinion to the Deputy Minister of Game & Fisheries that in view of the fact that there was a lease for one year entered into between the Department and the owners of the Jackson Building for a period of twelve months from the 1st of November, 1931, and that as the Department of Game & Fisheries continued after that date to pay rent, that the Department became a tenant from year to year, there being nothing in the lease expressing a contrary intention. Under such circumstances it is necessary to give six months' notice of an intention to terminate the lease which would be effective at the end of the year, that is, on the 31st day of October. Notice was given by the Department on April 17th, 1935, of its intention to terminate the lease on October 31st, 1935, and so the Department is liable to pay rent up to October 31st, 1935. In my opinion the Department wrongfully withheld payment of this rent and therefore interest at 5% should be added to the amount payable.

I return herewith the papers.

Yours faithfully,

C. R. Magone,
Acting Deputy Attorney General.

Gordon A. Brown, Esq.,
Provincial Auditor.
Buildings.

Re Issue of Treasury Board Minute During Session

Provincial Auditor's Office

Toronto, February 12th, 1936.

Honourable A. W. Roebuck,
Attorney General.

Dear Mr. Roebuck:

I have before me your application for a Treasury Board Minute for $200.00 to supplement the appropriation for Registration of Patents, Vote 26, item 4.

Before referring this application to the Honourable the Treasury Board, I felt that you should be advised of the fact that a Treasury Board Minute supplementing an appropriation has never been passed while the Legislature is in session.

In 1927, however, I procured from the Deputy Attorney General, the late Mr. Edward Bayly, a ruling which reads as follows:

> "Provisions of the Audit Act, Section 25, seem quite clear and are not limited. I am of opinion, therefore, that the sitting of the Legislature has nothing to say to the power of the Treasury Board to pass an order under its provisions. There is nothing in the Statute itself even to suggest that the sitting of the Legislature should curtail the Board's power and as under our system exhausted appropriations are not supplemented immediately by the Legislature when it is sitting, there would be no object in any other interpretation even if the Statute warranted it."

I would be glad to have your views on the matter.

Yours very truly,

G. A. Brown,
Provincial Auditor.

Department of Attorney General

Toronto 5, February 18th, 1936.

G. A. Brown, Esq.,
Provincial Auditor,
Buildings.

Re Treasury Board—Registration of Patents—Vote 26, Item 4

Dear Mr. Brown:

Replying to your communication dated February 12th to the Attorney General, in my view the only Section of The Audit Act which procludes the issuing of cheques for public money while the Legislature is in Session, is Section 13 and that deals with the issuing of a Special Warrant.

Section 25 of The Audit Act contains not even a suggestion that payments cannot be made in excess of appropriations while the Legislature is in Session.

The power of the Board under this Section is clearly expressed and is not limited in any way, and, therefore, the sitting of the Legislature has nothing to do in any way with the power of the Treasury Board to pass an Order under the provisions of Section 25.

This opinion which I have expressed herein follows the opinion of the late Deputy Attorney General given to you in 1927 and referred to in your letter of the 12th instant.

Yours very truly,

I. A. Humphries,
Deputy Attorney General.

C

TREASURY BOARD MINUTES

C

TREASURY BOARD MINUTES

STATEMENT OF TREASURY BOARD MINUTES ISSUED FOR EXPENDITURES IN EXCESS OF APPROPRIATIONS DURING THE FISCAL YEAR ENDED MARCH 31st, 1936

Agriculture Department

	Warrant	Expended
Commissioner of Marketing—		
Loans re Co-operative Marketing Loans Act	$ 62,900 00	$ 60,900 00

Attorney General's Department

	Warrant	Expended
Main Office—		
Commissions and Sundry Investigations	4.000 00	3,256 75
Office of Toronto and York Crown Attorney, salaries	4.000 00	3.171 69
Office of Local Masters of Titles, Registration of Patents	200 00	200 00
Audit of Criminal Justice Accounts, maintenance	250 00	160 84
Law Enforcement Branch, salaries	4,000 00	3,459 14
Ontario Securities Commission—		
Salaries	7,000 00	6,601 65
Services	15,000 00	14.957 61
Travelling expenses	800 00	577 53

Education Department

	Warrant	Expended
Public and Separate School Education—		
Continuation Schools, grants, etc	1.500 00	379 63
Departmental Examinations Branch—		
Assistants re Examinations	6.500 00	6.475 95
Training Schools Branch, salaries	1.000 00	881 29
Normal and Model Schools—		
University of Ottawa, payment to R. C. Separate School Board re use of schools	120 00	120 00
Monteith Northern Academy, salaries	1.800 00	1,754 29

Health Department

	Warrant	Expended
Dental Service Branch, salaries	1.500 00	1,420 29
Inspection of Training School for Nurses Branch—		
Travelling expenses	1.000 00	401 21
Maintenance	500 00	327 63
Preventable Diseases Branch—		
Outbreaks of diseases, sanitary investigations, etc	10,000 00	9,967 18
Tuberculosis Prevention Branch—		
Salaries	5,000 00	4.016 73
Maintenance	3,750 00	2,308 19
Industrial Hygiene Branch, salaries	3.900 00	2,958 79
Laboratory Divisions, salaries	4.000 00	3.326 45
Public Health Education Branch, salaries	2.000 00	1.832 00
Hospitals Branch—		
Grants, etc., General Hospitals and Charities—		
General Hospitals	396,491 65	280,969 36
Homes for Incurables	123.826 50	122.697 98
Maintenance of Patients in Municipal Sanatoria for Consumptives	351.356 56	351,356 56
Travelling expenses re indigent patients of unorganized territory	2.500 00	2.497 19
Ontario Hospitals—		
Hamilton, maintenance	5.000 00	4,976 44
Penetanguishene, salaries	2.800 00	383 26

	Warrant	Expended
Highways Department		
Main Office—		
Travelling expenses	10,000 00	9,267 65
Publicity (tourist)	15,000 00	14,999 51
Motor Vehicles Branch—		
Travelling expenses	6,000 00	2,148 15
Automobile markers and supplies	21,000 00	14,343 98
Insurance Department		
Main Office, travelling expenses	1,000 00	340 73
Lands and Forests Department		
Main Office—		
Annuities and bonuses to Indians	804 00	804 00
Department of Legislation		
Office of the Speaker—		
Temporary salaries	3,000 00	2,970 50
Lieutenant Governor's Office		
Salaries	1,396 51	1,396 51
Municipal Affairs Department		
Main Office—		
Salaries	10,000 00	7,780 50
Commissions and sundry investigations	6,500 00	6,175 92
Ontario Municipal Board—		
Travelling expenses	1,800 00	637 56
Northern Development Department		
Districts, Roads and Bridges, construction and maintenance (capital)	1,549,127 93	1,365,409 26
Prime Minister's Department		
Main Office, maintenance	250 00	247 22
Travel and Publicity Bureau, salaries	174 15	174 15
Civil Service Commissioner, salaries	1,196 77	1,196 77
Office of King's Printer, Official Gazette	750 00	258 60
Provincial Treasurer's Department		
Amusements Revenue Branch—		
Travelling expenses	10,900 00	9,780 74
Maintenance	8,000 00	6,923 01
Controller of Revenue Branch, salaries	21,000 00	20,488 71
Post Office, maintenance	18,000 00	15,325 31
Public Works Department		
Publc Buildings—Maintenance and Repairs—		
Government House—		
Salaries	1,033 28	175 21
Pay List—gardeners, firemen, etc., repairs to grounds, etc.	225 00	68 07
Telephone service	45 00	43 11
Public Buildings—Construction—		
Parliament and Departmental Buildings—		
Additional accommodation	5,500 00	4,415 31
Miscellaneous, purchase of property	31,000 00	30,905 45
Total Treasury Board Minutes	$2,746,397 35	$2,408,611 56

D

SPECIAL WARRANTS

D

SPECIAL WARRANTS

STATEMENT OF SPECIAL WARRANTS ISSUED DURING THE FISCAL YEAR ENDED MARCH 31st, 1936

Date of Warrant	SERVICE		Warrants	Expended 1935-36	Unexpended
	Agriculture Department				
July 24th, 1935	Waterford and Vicinity Community Club, grant		$400 00	$400 00	
	Attorney General's Department				
May 1st, 1935	Repayment of monies alleged to have been misappropriated by A. M. Judd, formerly Crown Attorney, Middlesex County		8,846 00	8,846 00	
	Education Department				
August 8th, 1935	L'Institut Canadien-Francais d'Ottawa, grant		200 00	200 00	
August 28th, 1935	Haileybury High School Board, grant for Mining Education		2,000 00	2,000 00	
December 6th, 1935	Services and expenses re Medical Examinations of students making application for admission to the different Training Schools for Teachers		8,000 00	2,391 00	5,609 00
	Health Department				
June 5th, 1935	To pay accounts in connection with the late Clarence R. Smith		413 25	413 25	
June 26th, 1935	Dental grants	$740 99			
November 14th, 1935	Dental grants	45 86	786 85	786 85	
July 9th, 1935	Public Health Laboratory, Queen's University, Kingston, special grant		700 00	700 00	
July 24th, 1935	Payment to Dr. Murray M. Fisher, reimbursement of Legal Fees in Williamson vs. Fisher		2993 06	2993 06	
August 8th, 1935	Payment to Dr. F. S. Ruttan, Medical Officer of Health. Woodstock		28 00	28 00	
December 4th, 1935	Canadian Social Hygiene Council, Toronto, grant		10,000 00	10,000 00	

December 4th, 1935	To assist in payment of Hospitalization of Indigent Patients from financially embarrassed municipalities in territorial districts	3,585 25	3,568 90	16 35
January 7th, 1936	Eldorado Gold Mines Ltd., of Port Hope, Ontario, for the purchase of radium	150,966 45	150,966 45	
February 7th, 1936	Ontario Hospital, Fort William, salaries, travelling expenses and maintenance	13,735 00	10,527 24	3,207 76
	Labour Department			
June 5th, 1935	National Labour Day Committee, special grant	100 00	100 00	
August 21st, 1935	Labour Day Celebration Committee, meals for unemployed members of labour organizations participating in Labour Day Parade	300 00	300 00	
	Lands and Forests Department			
May 15th, 1935	Allan, Killam and McKay Ltd., Winnipeg, Man., to cover insurance on mill and plant of the Indian Lake Lumber Co. Ltd., Osaquan, Ontario	3,072 00	3,072 00	
October 17th, 1935	Mrs. J. B. Marcoux, Notre Dame du Nord, Quebec, to cover the value of timber cut, under permits of the Forests Branch, on lot 11, concession 5, Harris Township	70 31	70 31	
	Department of Northern Development			
September 11th, 1935	Costs and expenses incurred in connection with the commission appointed to inquire into and report on certain charges at Matheson	5,000 00	$1,984 18	3,015 82
	Prime Minister's Department			
July 9th, 1935	Canadian Legion, grant re Provincial Convention at London, Ontario	500 00	500 00	
	Provincial Secretary's Department			
May 15th, 1935	Expenses re celebration of the twenty-fifth anniversary of the accession to the Throne of His Majesty King George the Fifth	3,900 00	3,788 32	111 68
July 17th, 1935	Prisoners Rehabilitation Society, grant	5,000 00	5,000 00	
	Provincial Treasurer's Department			
September 18th, 1935	Audio Pictures Ltd., Toronto, for the purchase of an Ampro 16MM sound on film projector, for Board of Censors	782 00	782 00	

SPECIAL WARRANTS—Continued

Date of Warrant	SERVICE	Warrants	Expended 1935-36	Unexpended
	Public Welfare Department			
May 1st, 1935	Purchase of three $1,000.00 Province of Ontario Government Bonds maturing 1971 to provide annuity for Harold Britton, Sarnia, Ont., who was injured while an inmate of the Victoria Industrial School at Mimico	3,200 00	3,195 00	5 00
October 17th, 1935	Construction of a Hydro Transmission line from the Village of Callander to the Dafoe Hospital for the Dionne Quintuplets	1,609 53	1,609 53	
November 1st, 1935	Allowance to Honourable D. A. Croll, to defray his expenses of travelling to England to attend the International Housing Conference and to investigate Unemployment Relief System, Welfare Work, Labour Problems, etc.	1,500 00	1,500 00	
November 5th, 1935	To retire bonded indebtedness of the Industrial Schools Association on Alexandra Industrial School, Toronto, the said school being transferred to the Welfare Department	20,000 00	20,000 00	
November 21st, 1935	Memorial Wreaths for Community Remembrance Services in the Province of Ontario	2,100 00	2,096 50	3 50
November 21st, 1935	Salaries, operating expenses, maintenance and repairs for the Alexandra Industrial School, Toronto, from November 1, 1935, to March 31, 1936	15,000 00	11,511 54	3,488 46
	Public Works Department			
December 4th, 1935	Purchase of one Globar Assay Furnace for the East Block, Parliament Buildings	1,080 00	1,080 00	
	Total Special Warrants	$265,867 70	$250,410 13	$15,457 57

REPORT FOR 1936

OF

The Workmen's Compensation Board
ONTARIO

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
Sessional Paper No. 28. 1937

ONTARIO

TORONTO
Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty
1937

Toronto, March 22nd, 1937.

To The Honourable Herbert Alexander Bruce,
Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

The undersigned has the honour to present herewith the Report of The Workmen's Compensation Board of Ontario for the year 1936.

A. W. Roebuck,
Attorney General.

HON. A. W. ROEBUCK, K.C.,
Attorney General,
Parliament Buildings,
Toronto, Ontario.

DEAR MR. ROEBUCK:

I have the honour to submit herewith the Annual Report of The Workmen's Compensation Board for the year 1936.

Yours truly,

GEO. WILKIE,
Chairman.

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THE WORKMEN'S COMPENSATION BOARD

Geo. Wilkie. K.C., Chairman
E. Hutchinson. Vice-Chairman
Dr. D. J. Galbraith, Commissioner
S. R. Johnston. Secretary

REPORT FOR 1936

OF

THE WORKMEN'S COMPENSATION BOARD

ONTARIO

To His Honour the Lieutenant Governor:

The Workmen's Compensation Board begs to submit its Report for the year 1936.

GENERAL REVIEW

The Board's offices are on the 4th floor of the Canada Life Building at 330 University Avenue, Toronto.

Accidents

The number of accidents reported during the year was 61.382. as compared with 58,546 during 1935.

The total benefits awarded during the year amounted to $5.643.798.79. as compared with $5,314,112.87 during 1935.

The length of time for which compensation was paid per accident to an injured workman was for the year 1934. 25.95 days. and for the year 1935, 29.86 days. The average weekly wage on which compensation was based was in 1934. $16.86; the corresponding wage in 1935. $17.60.

Funds

Of the awards for injured workmen a considerable number are in the form of pensions. and there are pension awards for widows and children and dependants of deceased workmen. These pensions are met out of the Accident Fund by setting apart for each pension a sum which, with the interest upon it, will provide for the payment of the pension during the period of its currency. The amount so set aside depends on the current interest rate. and the recent fall in interest rate has substantially increased the burden upon the funds of the Board. Until the 1st of June, 1935. pensions were computed on a 5% basis, but it had become apparent that moneys could no longer be invested so as to give a 5% return. and from that date onwards pensions have accordingly been based on a 3½% interest rate return per annum. It was particularly important that the provision for pensions from that date onwards should be adequate. for the reason that the Board was faced with heavy losses in the investments of the pension fund.

Some of the investments made prior to 1934 were in the form of municipal debentures, and of these $4.500.000 were in default for principal or interest. or both. and it was apparent that a loss greater or less would be faced by the Board in regard to this block of debentures. Since that time. while some interest has been paid upon the debentures. it has not been paid in full. and during 1936 the unpaid interest on defaulted debentures amounted to some $177,000. As that had continued for three years, the total loss of interest alone was upwards of half a million dollars. It was apparent that that loss would continue to be faced for some time, but it is hoped that in the not distant future some interest will be paid, and ultimately perhaps something upwards of one-half of the annual revenue from these debentures will be recovered. As to principal, it is difficult to say what may happen, but it is apparent also that there will be a substantial loss of principal as well.

In addition to this, the Board had its full share of the depression. The total receipts of the Board in 1929 amounting to $7,505,431.10 fell in 1931 to $4,608,677.15; in 1932 to $3.292,309.25; in 1933 to $2,729,936.14; and in 1934 to $4,192,200.35. The provisional credit balance shown by the Board's Annual Report of 1931 amounted to $1,690,273.77. In 1934 the provisional credit balance stood at $756,331.77. It was apparent in 1934 that unless steps were taken the surplus would become a deficit, and accordingly the adjusted rate for the year was increased so as to add to the year's income a substantial sum, which accounted for practically all of the surplus for that year.

The Board was, therefore, faced with the necessity of meeting a heavy loss in interest, the additional cost of maintaining the pension fund, and the increased amount to meet the deficits which in the course of three years had reduced the provisional surplus by upwards of $1.000.000. A perusal of this report will show that the deficits have ceased; that we have covered the annual loss of interest; and have also made the necessary provision for the new pensions; and have accumulated a substantial amount to meet the anticipated loss on the defaulting debentures.

Assessments

It has been apparent that the method of making assessments largely on the experience for the last preceding year was productive of a violent fluctuation in the rates, which was unsatisfactory to the employers who could not contract with a definite knowledge of what their rates of compensation were to be for the year in which the operations were being carried on. This year the assessments are being based upon a careful study of the last ten years of the Board's experience with the different classes and groups into which industry is divided, and the basic consideration for fixing the rate for each group and class has been the past ten years' experience of that group and class. It is hoped in this way to so stabilize the rates that, while they must inevitably vary from time to time, the variations shall be neither frequent nor large.

The volume of business transacted by the Board is double that of the year 1933, when the total amount collected was $2.729.936.41. A large amount of the increase has been due to the increase in woods operations and in the mining industry. The opening up of new mining territory has necessitated the appointment of an additional Silicosis Examining Doctor, and providing him with office, equipment, and staff in Fort William.

Pay Roll Audits

The audit of employers' pay rolls had long fallen into arrear, and in 1934 we added to our audit staff a number of men with a view to clearing up the arrears and in the hope that those arrears would be completely disposed of by the end of 1936. A great deal of auditing has been done with profitable results to the funds of the Board, and there is still hope that the arrears may be nearly, if not quite, caught up before the end of the present year. The audit has added considerably more to our administration expenses but has produced more than sufficient to pay all the costs involved.

Pension Survey

Since 1919-1920 there has been no survey of pensions by the Board's officers. Upon examination of 100 cases two cases were found of pensions being paid to pensioners not now entitled to them. It was therefore apparent that in the interest of the fund a survey and examination of the pensions should be made, and we accordingly started making a survey and examination and have found a number of cases in which pensioners were collecting pensions to which they were no longer entitled. The work is being continued, but at the rate at which it is now going it will be a considerable time before the survey can be completed. It is hoped that during the year 1937 it may be possible to add to our staff and expedite the completion of the work, which again is effecting a considerable relief on the funds of the Board, and of equal importance, ascertaining in some cases that the pensioners are not receiving all the pension to which their condition entitles them.

Wage Expenditure

The estimated total wage expenditure in Schedule 1 industries for the year 1936, based on provisional figures, is $425,603,000, as compared with $373,112,000 in 1935. The amounts of such expenditure in the different classes of industry are shown in Table 3.

Finances

While we have made substantial progress in meeting the financial condition resulting from the depression, it cannot be said that the condition has yet been fully met, and that cannot be done until the loss on the debentures in default shall have been ascertained.

There also remains the important question as to those groups and classes which formerly had large, and now have very small, pay rolls, and in some cases deficits incurred while their pay rolls were large. To adjust completely the conditions while the pay rolls in some instances are only 10% of what they formerly were would place a severe strain on these employers, and when the pay rolls have increased to normal the remaining burden can be more readily borne and the accounts can then be completely adjusted.

Applications

All employers coming under the Act by application are now being segregated into single groups in Class 22, so that those employers who are under by the force of the Act itself will no longer have their rates affected by employers who come under the Act by application. It will now be possible to determine definitely whether those who come in by application are or are not bearing their full share of the burden of assessment, and to secure greater uniformity in rates among those employers who apply to come under the Act.

Administration Expenses

Administration expenses have been reduced by $7,567.25 below those of 1935.

The percentage of receipts expended in administration for the past four years is as follows: for 1933, 6.40%; for 1934, 5.78%; for 1935, 4.37%; and for 1936, 4.06%.

Contents of Report

The Report gives a summary of the operations of the Board for the year 1936 as assembled from the Board's records, and the appendix gives a summary of the operations from the commencement of the Act until the end of 1936.

Dated at Toronto this 22nd day of March, 1937.

Geo. Wilkie, *Chairman.*
D. J. Galbraith, *Commissioner.*

CHAPTER I

SCHEDULE I INDUSTRIES FOR 1936

As some of the industries covered by the Act are under the collective liability system (the employer not being individually liable for accidents to his workmen but being assessed to provide a general fund out of which accidents occurring in his class of industry throughout the Province are taken care of) and others are under the individual liability system (the employer being liable to pay for accidents happening to his own workmen), separate financial statements have to be made for each. The industries under the collective liability system are included in Schedule 1, and those under individual liability in Schedule 2, the former comprising much the greater number.

This chapter deals with Schedule 1 industries for 1936. Schedule 2 industries are dealt with in Chapter II. while Chapter III deals with the work handled in both schedules and the administration of the Act generally during the year, Chapter IV with the different funds in both schedules and their standing at the end of 1936, and Chapter V gives financial and statistical information for 1935 which was not available when the report for that year was made.

Provisional Financial Statement

The provisional financial statement for the industries in Schedule 1 for 1936 is contained in Table 1. To show the standing for the year, estimates have to be made of adjustments of assessments according to actual pay rolls and on the retroactive rates (the assessments for the year being first levied on an estimate of pay roll and at a provisional rate). and estimates also have to be made of compensation and medical aid still to be awarded for accidents happening during the year which have not yet been finally disposed of by reason of the injured workman being still under medical treatment or reports not being received. These estimates contain also all liabilities for claims of previous years yet outstanding and provision for claims of prior years which may subsequently be adjusted. Final figures for the year 1936 will be shown in the next subsequent report in the same manner as the final figures for 1935 are shown in Table 15 of this report.

The difference is to be noted between the amount of compensation and medical aid awarded for the year's accidents and the amount awarded during the year. The latter is partly for the prior year's accidents, while upon the other hand it does not cover all the liability for the current year's accidents. The more correct system of charging each year as far as possible with its own accidents, and for that purpose keeping the year's accounts open till the end of the subsequent year, has been adopted. rather than the looser method of taking the amount awarded during the year as the cost of the year's accidents and leaving always an outstanding liability unprovided for. For the purpose of information and comparison, however, the amounts awarded during the year are shown in Chapter III.

Accounts for Each Class

The industries in Schedule 1 are divided into classes, and as each class (subject to any transfer that may be made to it from the Disaster Reserve in any case of undue burden) bears its own accident cost — the employers in the class being in effect a mutual insurance association — separate accounts have to be kept for the different classes. Each class is credited with its own assessments, its share of interest and other income, and with any transfer made to it from Disaster Reserve, or credit from any other source, and is charged with the cost of its own accidents, its share of administration expenses, the cost of its safety association if it has one, and with its share of any amount set aside for Disaster Reserve.

The figures for each class, and the provisional surplus or deficit for the year, and the balance forward from prior years, and the provisional surplus or deficit for all years, are shown in Table 1. The final figures for each class and also the figures for the different groups within the classes (as in Table 15) will be shown in the next report. The assessments are fixed according to the accident cost and other expenses and charges in each class and group and having regard to the other income and credits.

The classes are numbered and the nature of the industries in each is shown at the bottom of Table 1 and full enumeration of the industries will be found in Schedule 1 of the Act and in the Board's rate book, the latter also showing the grouping within the class.

Assessments and Other Credits

The total assessments in all classes of Schedule 1 for the year 1936, including estimated adjustments, amounted to $6,379,129.19. In assessments are included collections for default in making returns or payments and interest for under and over estimate of pay roll. The other income and credits for the year consisted of reimbursement for veteran cases, received from the Department of Pensions and National Health; collections under Section 83(4) for too many accidents; cost of accidents collected under Section 105 for failure to furnish pay roll prior to accident; recovery from third parties under Section 8; collections under Section 112(3) from employers for failure to furnish particulars of accidents; and refunds of accident costs. Other income and credits amounted to $44,796.58. The total income and credits for the year are, therefore, $6,423,925.77.

Compensation and Other Charges

The compensation for Schedule 1 industries for the year, including estimate for what is still to be awarded for accidents happening during the year, amounted to $3,920,411.49; the medical aid, including estimate for what is outstanding, amounted to $1,046,311.28; the administration expenses for Schedule 1, including $13,555.06 for mine rescue work, amounted to $326,479.10; and $151,443.75 was paid to employers' safety associations. The total expenditures and charges for the year were $5,444,645.62.

The provisional surplus for the year was $979,280.15. The balance forward from prior years was a surplus of $2,090,119.60, which, added to the surplus for the year less the carry-over for prior years' claims which amounted to $980,340.59, makes a net provisional surplus of $2,089,059.16 at December 31, 1936.

Number of Employers

Total number of employers listed in Schedule 1 at the end of 1936 was 22,658, as compared with 20,752 at the end of 1935. The number in each class and group of industry is shown in Table 2.

Wage Expenditure

The estimated total wage expenditure in Schedule 1 industries for the year 1936, calculated on provisional figures, is $425,603,000, as compared with $373,112,000 in 1935. The amounts for the different classes of industry are shown in Table 3.

The Board has no similar data for Schedule 2 and Crown industries as in these the employers pay for accidents to their own workmen and are not required to make pay roll returns or pay assessments upon them as in Schedule 1. The pay roll would probably be about one-third that of Schedule 1.

Average Rates of Assessment

Assessments in Schedule 1 are in the form of a percentage of pay roll, and the average rate or percentage over all the classes actually paid by the employers can be ascertained by relating the total assessments to the total wage expenditure. This, on the provisional figures, gives an average rate of assessment for 1936 of $1.50 on every $100 of pay roll. The average over all years since the commencement of the Act was $1.19.

15

LS

959
91
280
607
649
606
15
181
226
141
825
630
549
145
316
294
320
929
00
40
76
10
54
15

58

TABLE 1

PROVISIONAL FINANCIAL STATEMENT FOR SCHEDULE 1, BY CLASSES, AS AT DECEMBER 31, 1936

Class	INCOME AND CREDITS (Actual and Estimated)				EXPENDITURE AND CHARGES (Actual and Estimated)									SURPLUS OR DEFICIT FOR YEAR (Provisional)	Estimated to Complete Prior Years' Accidents	Balance Forward Prior Years	SURPLUS OR DEFICIT ALL YEARS (Provisional)	Class
	Collected on Provisional Assessments	Estimated Adjustments of Assessments	Sections 8, 83 (4), 105, 112 (3), Etc.	TOTAL FOR YEAR	Compensation Paid, other than Pensions	Transferred for Pensions Awarded	Compensation Awarded, Payment Deferred	Compensation Estimated Outstanding for 1936 Accidents	Medical Aid Paid	Medical Aid Estimated Outstanding for 1936 Accidents	Administration Expenses and Mine Rescue Work	Paid to Safety Associations	TOTAL FOR YEAR					
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
1	432,920 38	238,000 00	4,761 72	675,682 10	137,042 06	27,663 50	1,275 00	211,992 06	75,080 89	19,412 27	31,732 75	19,955 00	524,153 53	151,528 57	38,259 03	—241,079 12	—127,809 58	1
2	227,844 82	33,750 00	1,352 25	262,947 07	58,971 95	52,266 00	380 00	65,970 12	31,285 24	17,446 75	13,068 73	13,000 00	252,388 79	10,558 28	33,794 60	164,191 04	140,954 72	2
3	56,423 51	8,600 00	328 19	65,351 70	12,720 33	4,787 00	400 00	9,063 65	8,618 64	1,370 55	3,544 07	2,759 60	43,263 84	22,087 86	1,125 00	—11,502 69	9,460 17	3
4	131,946 62	55,150 00	875 82	187,972 44	25,194 61	5,243 00	1,170 00	51,160 02	14,925 68	6,657 38	7,019 64	5,465 95	116,836 28	71,136 16	24,750 00	—47,871 79	—1,485 63	4
5	1,029,677 17	81,350 00	2,915 68	1,113,942 85	184,658 99	192,794 25	1,300 00	566,521 46	81,905 26	154,433 79	**70,591 12	11,500 00	1,263,704 87	—149,762 02	116,845 10	950,467 62	683,860 50	5
6	107,456 22	73,525 00	894 81	181,876 03	17,713 86	23,613 00	....	157,558 13	10,968 75	9,483 09	7,336 50	5,712 60	232,385 93	—50,509 90	55,198 79	120,714 17	15,005 48	6
7	81,184 12	70,000 00	....	151,184 12	11,012 42	15,821 00	....	21,334 89	8,754 10	3,287 98	4,718 77	3,674 38	68,603 54	82,580 58	9,875 00	102,586 49	175,292 07	7
8	145,276 31	36,200 00	166 80	181,643 11	17,061 73	....	....	76,829 19	11,322 69	7,800 14	7,882 10	6,137 48	127,033 33	54,609 78	72,531 25	67,465 64	49,544 17	8
9	126,739 80	35,650 00	4,113 09	166,502 89	29,575 47	16,129 00	150 00	49,863 51	26,875 53	11,992 00	7,637 46	5,947 02	148,169 99	18,332 90	26,687 50	214,699 23	206,344 63	9
10	296,262 77	92,150 00	2,191 94	390,604 71	58,301 82	36,581 94	455 00	87,565 76	45,097 06	10,354 05	16,250 56	12,653 80	267,259 99	123,344 72	84,285 13	141,985 13	181,044 72	10
11	284,685 23	90,800 00	830 27	376,315 50	48,559 31	9,129 75	1,250 00	111,908 00	49,633 51	24,406 46	15,326 93	11,934 58	272,148 54	104,166 96	30,484 64	—3,353 70	70,328 62	11
12	173,229 13	50,900 00	1,033 01	225,162 14	33,550 00	53,363 00	....	53,639 70	23,808 52	12,824 36	10,858 91	8,455 47	196,499 96	28,662 18	35,824 21	93,172 93	86,010 90	12
13	65,714 56	14,600 00	322 20	80,636 76	14,427 69	17,858 00	....	23,656 09	8,853 30	5,132 15	3,961 15	.....	73,888 38	6,748 38	13,281 25	21,270 25	14,737 38	13
14	59,040 44	12,400 00	196 58	71,637 02	8,529 97	2,350 00	....	15,267 34	8,708 20	3,816 84	3,371 50	2,625 24	44,669 09	26,967 93	9,812 50	—20,443 27	—3,287 84	14
15	335,039 12	81,950 00	7,820 76	424,809 88	69,515 36	17,080 00	187 50	79,922 01	46,279 90	8,975 89	19,562 44	15,232 64	256,755 74	168,054 14	63,575 51	—93,066 13	11,412 50	15
16	103,153 61	18,900 00	120 75	122,174 36	18,070 77	25,632 00	....	30,896 17	13,092 55	7,005 64	6,418 71	4,997 94	106,113 78	16,060 58	7,755 55	68,552 43	76,857 46	16
17	83,830 06	31,800 00	2 00	115,632 06	20,864 73	3,802 50	....	33,531 18	14,397 33	2,833 04	5,156 44	4,015 14	84,600 36	31,031 70	4,826 71	38,153 34	64,358 33	17
18	86,948 55	10,400 00	725 79	98,074 34	17,142 96	17,963 00	....	14,903 35	14,337 55	4,555 07	5,324 28	4,145 84	78,372 05	19,702 29	33,861 97	41,396 66	27,236 98	18
19	71,091 57	7,400 00	514 17	79,005 74	17,550 77	7,349 00	....	30,065 81	11,073 67	6,143 01	4,007 40	3,120 41	79,310 07	—304 33	1,000 00	—3,993 81	—5,298 14	19
20	276,905 01	92,800 00	2,534 64	372,239 65	72,048 67	54,630 00	1,590 00	89,923 10	43,316 57	11,231 38	17,870 01	.....	290,609 73	81,629 92	73,687 50	78,315 34	86,257 76	20
21	194,757 86	59,900 00	6,465 38	261,123 24	62,968 43	19,851 00	650 00	97,600 76	32,987 10	12,280 46	15,113 53	.....	241,451 28	19,671 96	59,174 06	123,960 37	84,458 27	21
22	61,181 13	350 00	298 31	61,829 44	9,940 31	8,561 00	....	12,743 90	5,831 02	1,980 28	3,054 66	3,988 75	46,099 92	15,729 52	18,750 00	70,204 70	67,184 22	22
23	126,426 10	—2,300 00	2,106 48	126,232 58	20,144 78	28,755 00	350 00	32,505 05	11,501 25	8,937 46	7,862 10	6,121 91	116,177 55	10,055 03	21,916 94	304,337 46	292,475 55	23
24	562,020 10	65,100 00	4,225 94	631,346 04	104,025 42	88,898 00	....	187,119 39	56,528 29	38,768 64	38,809 34	.....	514,149 08	117,196 96	143,038 35	—90,042 69	—115,884 08	24
ALL.	5,119,754 19	*1,259,375 00	†44,796 58	6,423,925 77	1,069,592 41	730,120 94	9,157 50	2,111,540 64	655,182 60	391,128 68	326,479 10	151,443 75	5,444,645 62	979,280 15	980,340 59	2,090,119 60	2,089,059 16	ALL

*Adjusted on actual pay rolls and retroactive rates.

†Includes: Sec. 8, $14,287.32; Sec. 83 (4), $100.00; Sec. 105, $6,501.94; Sec. 112 (3), $228.33; Reimbursement from D.P. and N.H., $4,490.66; from Accident Cost Refunds, $19,188.33.

**Includes Mine Rescue Work, $13,555.06.

Class Numbers of Industries

1. Lumbering.
2. Pulp and paper mills.
3. Furniture mfg., etc.
4. Planing mills, etc.
5. Mining and explosives.
6. Brick mfg., quarrying, and glass works.
7. Rolling mills, etc.
8. Foundries, etc.
9. Fabrication structural steel, etc.
10. Metal articles, jewellery mfg., etc.
11. Agricultural implements, etc.
12. Gas, petroleum, paint, drugs, soap, etc.
13. Milling.
14. Abattoirs, etc.
15. Bakeries, canning, liquors, and tobacco.
16. Tanneries, leather and rubber goods.
17. Textiles.
18. Clothing, power laundries, etc.
19. Printing and stationery.
20. Teaming, cartage, coal and wood yards, etc.
21. Road construction, etc.
22. Electric power, etc.
23. Steel construction, railway and canal construction, dredging, fishing, etc.
24. Building.

TABLE 2

NUMBER OF FIRMS IN SCHEDULE 1, BY CLASSES AND GROUPS, DECEMBER 31, 1936

Class	Group 0	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	TOTALS
1	63	51	845								959
2	32	42	17								91
3	280										280
4	343	49	75	24	116						607
5	23	436	4	148		12	14	12			649
6	70	123	7	139	51	102	114				606
7	15										15
8	104		43	34							181
9	15	13	1	16	167	14					226
10	340	306	33	87	60	25	179	111			1,141
11	31	757	35	2							825
12	66	169	122	20	253						630
13	542	107									649
14	145										145
15	394	282	70	213	71	250	36				1,316
16	58	103	75	19	39						294
17	135	138	47								320
18	750	179									929
19	310	569	53	68							1,000
20	1,780	1,160									2,940
21	307	169									476
22	410										410
23	75	46	433								554
24	3,535	396		453	1,168	1,016	367	160		320	7,415
All											22,658

TABLE 3

ESTIMATE OF WAGE EXPENDITURE, SCHEDULE 1 BY CLASSES, FOR 1936

Class	Wage Expenditure
1	$8,750,000
2	15,512,000
3	6,765,000
4	7,331,000
5	46,042,000
6	7,063,000
7	10,085,000
8	8,777,000
9	14,113,000
10	40,731,000
11	39,491,000
12	24,036,000
13	5,977,000
14	6,845,000
15	42,704,000
16	22,003,000
17	26,139,000
18	23,888,000
19	25,695,000
20	11,104,000
21	7,317,000
22	4,482,000
23	3,203,000
24	17,550,000
TOTAL	$425,603,000

CHAPTER II

SCHEDULE 2 INDUSTRIES DURING 1936

Table 4 is a statement of the compensation awarded and the moneys handled during 1936 in Schedule 2 industries (in which the employer is individually liable for accidents to his workmen). Dominion Crown Cases under the Act by Dominion legislation, and Provincial Crown Cases referred to the Board for adjustment, are included.

The total amount of compensation awarded in Schedule 2 industries and Crown cases during 1936 was $1,031.874.20. Of this amount, $281.958.49 was for workmen of municipal corporations; $198,173.34 for steam railroads; $6,365.42 for electric railways; $43.136.34 for navigation companies; $1,010.04 for express and sleeping car companies; $7.038.51 for telephone and telegraph companies, and $178.75 for all other industries in Schedule 2; $282,866.34 for Dominion Crown cases and $211,146.97 for Provincial Crown cases. Of the total amount awarded, $627,577.08 was for pensions in pension cases, and $404,297.12 was for cases not pension cases and for compensation not pensions in pension cases.

In pension cases, except in the case of municipal or government bodies or departments thereof, not so desiring, deposits must be made by employers in Schedule 2 industries. Particulars of these are given under "Deposits under Section 28." Under "Claimants' Moneys" are included moneys held by the Board under awards in which in the interest of the claimant, or for some other reason, payment of the amounts held is deferred to a later date, as in the case of minors. "Deposits under Section 32" are amounts deposited with the Board to enable the Board to make prompt payments without waiting for receipt of cheque from employer.

Employers in Schedule 2 are assessed their share of the expense of administration as set out in Table 8. For 1936 that share amounted to $26,616.04, as compared with $22,800.86 in 1935, and $23,074.66 in 1934. Proportionate to the amount of compensation awarded, administration expenses in Schedule 2 and Crown Cases were 5.80 per cent. in 1936, as compared with 8.07 per cent. in 1935, and 8.88 per cent. in 1934.

Further information as to Schedule 2 funds and particulars of Schedule 2 investments are given in Chapter IV and in Tables 9 and 14, and in the Appendix.

TABLE 4

STATEMENT FOR SCHEDULE 2 DURING 1936

SCHEDULE 2 AWARDS

	Awards not Pensions	Pensions	TOTALS
Municipal Corporations, etc.	$76,228 30	$205.730 19	$281,958 49
Steam Railroads	58.252 81	139.920 53	198.173 34
Electric Railways	3.051 42	3.314 00	6.365 42
Navigation Companies	25.173 72	17.962 62	43.136 34
Express and Sleeping Car Companies	1.010 04	....	1.010 04
Telephone and Telegraph Companies	550 77	6.487 74	7.038 51
All Others	178 75	....	178 75
Dominion Crown Cases	136.853 34	146.013 00	282.866 34
Provincial Crown Cases	102.997 97	108.149 00	211.146 97
TOTALS	$ 404.297 12	$ 627.577 08	$1,031.874 20

SCHEDULE 2 FUNDS

Deposits under Section 28

Cash in bank and invested, Jan. 1, 1936	$3,363,598 39	
Deposits received from employers	180,738 33	
Interest received	175,540 01	
Paid to pensioners		$329,840 83
Deposits returned to employers		728 36
Cash in bank and invested, Dec. 31, 1936		3,389,307 54
	$3,719,876 73	$3,719,876 73

Claimants' Moneys

Cash in bank and invested, Jan. 1, 1936	$19,350 33	
Deposits received from employers	1,590 00	
Interest received	934 30	
Paid to claimants		$4,967 60
Cash in bank and invested, Dec. 31, 1936		16,907 03
	$21,874 63	$21,874 63

Deposits Under Section 32

Cash in bank and invested, Jan. 1, 1936	$58,544 39	
Deposits received from employers	772,806 95	
Payments made — Compensation and Medical Aid		$756,698 35
Deposits returned to employers		21,213 48
Cash in bank, Dec. 31, 1936		53,439 51
	$831,351 34	$831,351 34

Reserve for Depreciation of Securities

Profit on Sale of Investments	$158,943 68	
Cash in bank and invested, Dec. 31, 1936		$158,943 68
	$158,943 68	$158,943 68

TOTALS OF FUNDS

Cash in bank and invested, Jan. 1, 1936	$3,441,493 11	
Deposits received from employers	955,135 28	
Interest received	176,474 31	
Reserve for depreciation of securities	158,943 68	
Payments made		$1,091,506 78
Deposits returned to employers		21,941 84
Cash in bank and invested, Dec. 31, 1936		3,618,597 76
	$4,732,046 38	$4,732,046 38

CHAPTER III

WORK HANDLED DURING 1936

This chapter deals with the work handled during 1936 and with the administration of the Act generally during the year. Particulars are given in Tables 5 to 8.

The figures are for what has been dealt with during 1936 without regard to the year in which the accidents dealt with occurred. while as explained in Chapter I the figures in Chapter I and Chapter V are for the accidents happening during the year.

Benefits Awarded During the Year

The total amount of compensation awarded during 1936 was $4,585,156.43, of which $3,553,282.23 was in Schedule 1 industries. $537,860.89 in Schedule 2 industries, and $494,013.31 in Crown cases. There was also paid for medical aid in Schedule 1 during the year $1,058,642.36. making the total benefits awarded during the year $5,643,798.79. In Schedule 2 and Crown cases medical aid is provided directly by the employer and no figures are available.

The benefits awarded each year, and the total since the commencement of the Act, are as follows:

	Schedule 1		Schedule 2 and Crown	
Year	Compensation	Medical Aid	Compensation	Total Benefits
1936	$3.553.282 23	$1.058.642 36	$1.031.874 20	$5,643,798 79
1935	3,225.898 54	1.037.682 86	1.050.531 47	5.314.112 87
1934	2,745.239 16	841.738 41	912.729 66	4.499.707 23
1933	2.298.787 97	667,581 69	732.699 29	3.699.068 95
1932	3.202.639 27	817.240 38	1.105.740 91	5.125.620 56
1931	3,917.045 43	1.060.763 01	1,043.583 66	6,021,392 10
1930	4,942.756 25	1.336.046 05	1,144,216 52	7.423,018 82
1929	5.346.621 19	1.385.524 62	1.280,011 97	8,012.157 78
1928	4.565.688 56	1.166,507 54	1.335.750 83	7.067,946 93
1927	3,930.417 59	1.062.859 64	1.091.377 64	6.084.654 87
1926	3,664.039 94	988.486 70	1.168,825 26	5.821.351 90
1925	3,635.530 27	875.836 01	1.054.077 11	5.565.443 39
1924	4,052.287 77	835.956 60	1.234,575 97	6.122.820 34
1923	4,036.170 26	788,905 90	1.348.785 58	6.173.861 74
1922	3.417,101 61	692.819 94	1.582.975 06	5,692,896 61
1921	3,858.017 50	662.793 89	1.668,452 10	6,189,263 49
1920	5.113.149 77	703.705 66	1.963.389 82	7.780.245 25
1919	2.808.638 65	386.298 51	997.922 77	4.192.859 93
1918	2.751.137 45	369.346 37	763.511 02	3.883.994 84
1917	2.286.954 99	*83.514 07	623.556 37	2.994.025 43
1916	1,553.653 38	†	451.709 93	2.005.363 31
1915	692,389 09	†	200,932 03	893.321 12
Totals	$75,597.446 87	$16.822.250 21	$23.787.229 17	$116.206.926 25

* Half year only. † No provision for medical aid.

The increase in benefits from the early years is largely by reason of increase in wages, compensation being for the most part a percentage of wages. and additional industries have been covered, and some material changes were made in compensation. The large total for 1920 is by reason of the retroactive increase in widows' and children's pensions. and the small amount awarded during 1915 is by reason of many 1915 accidents not being. nor capable of being. finally disposed of till the following year. The amount of benefits awarded for each year's accidents. as distinguished from the amount awarded during the year, is shown in Chapter V.

Accidents Reported During the Year

During 1936. 61.382 accidents were reported. These included some not serious enough to involve payment of either compensation or medical aid and for which no claim was made. and others for which claims were made but which were not allowed by the Board.

At the close of the year there were 1,375 claims in assembly as compared with 1,120 at the end of 1935, notice of the accident having been given but reports necessary to deal with the case not yet having been received.

The number of accidents reported each year, and the total number since the commencement of the Act, are as follows:

Year	Schedule 1	Schedule 2	Crown	Totals
1936	55.878	2.515	2,989	61,382
1935	50.690	2,208	5,648	58,546
1934	44,858	2,244	7,628	54.730
1933	33.227	1,890	2,925	38,042
1932	35,264	2.474	3,732	41,470
1931	46,069	3.348	3.477	52.894
1930	61,490	4.486	3,291	69,267
1929	76.029	6.008	5,066	87,103
1928	69.011	5,815	4.572	79,398
1927	62.063	5.412	4,504	71,979
1926	57,032	4,942	3,942	65,916
1925	50.883	5,079	4.050	60.012
1924	49.558	4,916	4,201	58.675
1923	51,655	6,080	3,374	61.109
1922	42,139	7,124	1,148	50,411
1921	36.272	7,666	1,253	45,191
1920	46,177	7,222	1.452	54.851
1919	36.236	7,918	106	44,260
1918	40.662	7,113	73	47,848
1917	30.701	5.813	18	36,532
1916	21.269	4,806	17	26,092
1915	13.878	3,144	11	17.033
All years	1,011,041	108,223	63,477	1,182,741

Accidents Paid For During the Year

Table 5 shows the number of accidents in which compensation or medical aid was paid during the year. The total number was 56,189, as compared with 54,298 during 1935. The 56.189 comprised 299 deaths, 30 permanent total disability cases, 584 permanent partial disability cases, 25,712 temporary disability cases, and 29,564 medical aid only cases. Except for Provincial Crown Cases, Schedule 2 and Crown cases, involving medical aid only, which are a large proportion of the accidents reported, are not included as accidents paid for, as the medical aid is furnished directly by the employer.

The number of accidents in which compensation or medical aid was awarded each year since the commencement of the Act is as follows:

Year	Schedule 1	Schedule 2	Crown	Totals
1936	51,620	1,828	2,741	56,189
1935	46,960	1,707	5.631	54,298
1934	41.244	1.800	6.258	49.302
1933	29.766	1,487	2,453	33.706
1932	38.469	1.914	3.521	43,904
1931	43.611	2.561	2.710	48.882
1930	56,715	2,723	2,357	61,795
1929	68.195	2.883	2,737	73.815
1928	61.384	2,723	2,425	66,532
1927	55.894	2.741	2,443	61.078
1926	52,199	2,489	2,182	56.870
1925	47,782	2.734	2,217	52.733
1924	46.616	2,820	2,475	51,911
1923	47,873	3,849	1,916	53.638
1922	37,172	4.572	765	42.509
1921	34.271	5.161	834	40.266
1920	42,693	4,444	714	47,851
1919	34,400	4,517	153	39,070
1918	36.565	4,335	30	40,930
* 1917	25.277	3,406	19	28,702
* 1916	15.370	2,825	3	18.208
* 1915	8,328	1,494	7	9,829

* Cases involving medical aid only not covered till July 1, 1917.

Awards Changed

In addition to claims compensated, as shown in Table 5, the Board in 1936 opened for further award 528 claims which had been settled previously.

Cheques, Assessments, Mail and Callers

In all, 260,374 cheques were issued during 1936, an average of about 868 daily, and there were 28,946 assessments made, including refunds. About 6,100 pieces of mail were handled daily, and the average number of office callers was 56 a day.

Receipts and Payments

The receipts and payments during the year are shown in Table 6, the statement for Schedule 2 including Crown cases. Explanation of the items and the funds referred to will be found in other parts of the report. A summary of receipts and payments since the commencement of the Act is given in the Appendix.

Payments to Safety Associations

The safety or accident prevention associations are organizations of employers established under the authority of the Act by the employers in twenty out of the twenty-four classes of industry. They are under the management of the employers, but the expenses are paid by the Board out of the accident fund.

The total amounts so paid are set out in Table 7, which table also shows the amount paid out on account of mine rescue work in Class 5.

Administration Expenses

The administration expenses of the Board, analyzed under the different headings, are shown in Table 8. The gross administration expenses during 1936 were $388,403.24, which included special statistical services for which refunds have been received of $11,077.13, making the total administration expenses $377,326.11, as compared with $384,893.36 during 1935. The employers pay the whole expenses of the administration of the Act. The amount is divided according to the number of accidents handled among Schedule 1 (Accident and Silicosis Funds), Schedule 2 and Dominion and Provincial Crown.

The amount charged to the Silicosis Fund was $2,855.31; to the Rehabilitation Clinic, $1,000.00; to Mine Rescue Work, $648.31; and to Schedule 1 employers, $312,924.04; to Schedule 2, $26,616.04; to Dominion Crown, $21,385.99 and to Provincial Crown, $11,896.42.

The cost of office furniture, fixtures, and equipment, including permanent equipment, has always been charged to administration expenses in the year in which payment therefor was made, and no entry for which has ever been made in the standing of the funds. The value of this furniture and equipment at the present time is estimated at about $25,000.

The total administration expenses for 1936 less expenses of supervising work in connection with silicosis, rehabilitation and mine rescue stations (not properly administrative work) and handling claims for silicosis were 6.61 per cent. of benefits awarded, being 6.78 per cent. of benefits awarded in Schedule 1 and 5.80 per cent. in Schedule 2 and Crown cases.

TABLE 5

COMPENSATION, MEDICAL AID, AND ACCIDENTS PAID FOR, DURING 1936

Compensation Awards during 1936

Schedule 1	$3,553,282 23
Schedule 2	537,860 89
Crown Cases	494,013 31
Total	$4,585,156 43

Medical Aid Paid during 1936

Schedule 1	$1,058,642 36
Schedule 2	furnished by employer
Crown Cases	furnished by employer

Accidents Paid for During 1936

	Medical Aid only	Temp. Dis.	Perm. Partial Dis.	Perm. Total Dis.	Death	TOTALS
SCHEDULE 1—						
Full Compensation	....	19,259	506	22	181	19,968
Part Compensation	....	2,542	......	....	48	2,590
Medical Aid Only	29,062	....	......	....	......	29,062
Totals	29,062	21,801	506	22	229	51,620
SCHEDULE 2—						
Full Compensation	....	1,529	35	5	34	1,603
Part Compensation	....	193	......	....	9	202
Medical Aid Only	23	....	......	....	......	23
Totals	23	1,722	35	5	43	1,828
CROWN CASES—						
Full Compensation	....	2,002	43	3	23	2,071
Part Compensation	....	187	......	....	4	191
Medical Aid only	479	....	......	....	......	479
Totals	479	2,189	43	3	27	2,741
GRAND TOTALS	29,564	25,712	584	30	299	56,189

TABLE 6

STATEMENT OF RECEIPTS AND PAYMENTS DURING 1936

Schedule 1

RECEIPTS

Cash in Banks, Jan. 1, 1936:		
Canadian Bank of Commerce	$1.788 21	
Royal Bank of Canada	5.149 84	
Dominion Bank	128.961 50	
		$135.899 55
Net Assessments, Penalties, etc.:		
Gross Assessments	$6.127.734 47	
Under Section 8	15.628 40	
Under Section 105	6.501 94	
Under Section 112(3)	228 33	
Under Section 83(4)	100 00	
From D. P. & N. H.	4,490 66	
From Accident Cost Refunds	19,188 33	
	$6.173.872 13	
Less:		
Assessments and Penalties refunded	$21,712 72	
Merit Rating Refunds	31 20	
	$21.743 92	
		6.152.128 21
Interest:		
From Investments	$1,135,971 72	
Exchange Premium	383 13	
From Bank and Short Date Deposits	9,908 53	
		1.146.263 38
Investments:		
Principal returned	$4.745.012 87	
Profit on Sale of Investments	400.369 25	
		5.145.382 12
From Schedule 2 and Crown Employers for Administration Expenses, account of Prior years, paid out of Schedule 1 in 1935		84,805 84
Silicosis		215.727 96
Special Statistical Services		11.077 13
Rehabilitation Clinic:		
Refunds from Medical Aid	$9.709 34	
Refunds from Schedule 2 Employers	396 38	
		10,105 72
		$12.901.389 91

PAYMENTS

Compensation Paid, other than Pensions and Compensation Deferred		$1.644,191 03
Pensions		2,032,334 26
Deferred Compensation		20,873 35
Rehabilitation		4,404 40
Medical Aid		1,046,053 01
Silicosis		121.397 20
Under Section 8		1.341 08
Mine Rescue Work		12.906 75
Administration Expenses		388.403 24
Safety Associations		151.443 75
Rehabilitation Clinic Expenses		8.216 72
Investments		7.261.715 56
Cash in Banks, Dec. 31, 1936:		
Canadian Bank of Commerce	$4,775.44	
Royal Bank of Canada	22.815 58	
Dominion Bank	180.518 54	
		208,109 56
		$12,901,389 91

Table 6—Continued

Schedule 2

RECEIPTS

Cash in Imperial Bank of Canada. Jan. 1, 1936		$12,952 40
Employers' Deposits under Section 28		180,738 33
Employers' Deposits under Section 32		772.806 95
Employers' Deposits of Claimants' Moneys		1.590 00
Interest:		
From Investments	$175.726 97	
Exchange Premium	270 00	
From Bank Deposits	477 34	
		176.474 31
Investments:		
Principal returned	$846.449 39	
Profit on Sale of Investments	158,943 68	
		1.005.393 07
		$2,149,955 06

PAYMENTS

To Claimants out of Deposits under Section 28		$329.840 83
Deposits returned to Employers under Section 28		728 36
To Claimants out of Claimants' Moneys		4,967 60
Paid out of Deposits under Section 32:		
Compensation	$697,048 05	
Medical Aid	59.650 30	
		756.698 35
Deposits returned to Employers under Section 32		21,213 48
Investments		968,094 11
Cash in Imperial Bank of Canada. Dec. 31, 1936		68.412 33
		$2,149,955 06

TABLE 7

PAYMENTS TO SAFETY OR ACCIDENT PREVENTION ASSOCIATIONS, 1936

Association	Class	Total Payments	
Lumbermen's Safety Association	1	$ 19.955 00	
Ontario Pulp and Paper Makers' Safety Association	2	13.000 00	
Class 5 Accident Prevention Association	5	11.500 00	
Industrial Accident Prevention Associations	3, 4. 6, 7, 8. 9, 10. 11, 12, 14, 15, 16, 17, 18, 19. 230	103.000 00	
Electrical Employers' Association of Ontario	22	3,988 75	
TOTAL			$ 151.443 75

PAYMENTS FOR MINE RESCUE WORK (CLASS 5), 1936

Maintenance of Stations, Salaries and Supplies	$12.906 75	
Administrative Supervision	648 31	
		$13,555 06

REHABILITATION CLINIC ACCOUNT, 1936

Credit from 1935	$660 87	
Receipts during year	10,105 72	
	$10.766 59	
Payments during year	8.216 72	
Balance. December 31, 1936		$2.549 87

TABLE 8

ANALYSIS OF ADMINISTRATION EXPENSES DURING 1936

Salaries of Board and Staff	$282.472 73	
Travelling Expenses of Board and Staff	24,970 52	
Printing, Stationery, and Office Supplies	17,188 52	
Postage	25.530 85	
Telephone, Telegraph, and Express	2,002 50	
Legal Expenses. Witness Fees. etc.	1.818 96	
Medical Examinations. X-ray Supplies, etc.	1,411 43	
Workmen's Travelling Expenses	196 60	
Insurance and Security Service	2.033 09	
Auditor's Services. under instructions of Attorney General	2.500 00	
Special Actuarial Services (S. H. Pipe and Co.)	500 00	
Office Rent	16.544 00	
Permanent Equipment	8,171 16	
Miscellaneous Services and Repairs	2,339 78	
Meals for Staff when Working Over-time (nights, and Saturday afternoons, etc.)	718 80	
Miscellaneous	4 30	
Gross Administration Expenses, 1936	$388.403 24	
Received for Special Statistical Services	11,077 13	
TOTAL ADMINISTRATION EXPENSES		$377,326 11
Charged to Rehabilitation Clinic	$1,000 00	
Charged to Silicosis Account	2.855 31	
Charged to Mine Rescue Work	648 31	
Charged to Dominion of Canada	21.385 99	
Charged to Province of Ontario	11.896 42	
Charged to Schedule 2 Employers	26.616 04	
Charged to Schedule 1 Employers	312.924 04	
		$377.326 11

CHAPTER IV

CONDITION OF FUNDS

A general statement of the condition of the funds in Schedule 1 and in Schedule 2 is contained in Table 9, and particulars of the various funds and of the Board's investments are given in Tables 10 to 14. A summary since the commencement of the Act will be found in the Appendix.

Schedule 1 Funds

The Schedule 1 funds are known and referred to in the Act as the "Accident Fund." They comprise, in addition to current funds out of which temporary payments of compensation, medical aid, and administration expenses are paid, the Pension Fund, Disaster Reserve, and Compensation Deferred. The standing of the Accident Fund, showing assets and liabilities, at December 31, 1936, is shown in Table 9. The balance of assets in excess of liabilities at that date was $2,868,779.41, being $270,501.44 Disaster Reserve, $2,089,059.16 standing at the credit of the classes December 31, 1936, and $509,218.81 reserve for depreciation of securities. This is exclusive of office equipment and furniture mentioned in Chapter III.

Pension Fund

The Pension Fund, representing the outstanding pension liability, comprises the largest part of the funds standing to the credit of Schedule 1. The purpose of the Pension Fund is to take care of future payments of pensions which have already been awarded. Actuarial tables, embodying the contingencies of death and remarriage, have been compiled to show for each age and kind of pension the average amount (sometimes referred to as capitalized value) necessary to complete pension payments. When a pension is awarded this average amount is transferred from current funds to the Pension Fund. All payments of pensions are made from the Pension Fund. Since the amount transferred in any one instance is the average amount required, no re-transfer is made should a residue be left at the expiry of the pension, nor is any additional transfer made should the amount be exhausted before expiry of the pension.

Re-Transfer from Pension Fund

During the years 1923 and 1924 an actuarial survey of the Board's pension experience and revaluation of the pension liability was made, all existing pensions being revalued. As a result the Pension Fund was found to be a little in excess of what the experience indicated to be necessary. As at date of January 1, 1924, a re-transfer of $600,000 was accordingly made from the Pension Fund to current funds, being distributed among the different classes of industry in proportion to the amount of Pension Fund to the credit of each class.

As of date October 31, 1925, actuarial revaluation of all outstanding pension fund obligations was made, the Board's actuarial tables being used. To the liability for each class thus ascertained was added a surcharge of two per cent. to allow for possible divergence of actual from expected mortality. Deduction was made of the surcharge liability in total for all the classes from the balance in the Pension Fund and the difference was re-transferred to the current funds, proportional to each class according to the balance in the Pension Fund. The sum transferred amounted to $427,214.62.

Particulars of Pension Fund

Table 10 gives particulars of the Pension Fund for each class. The balance in the fund at the commencement of 1936 was $20,632,800.27; $1.833,707.10 was transferred during the year for pension awards; $1,026,674.33 interest was added, and $2,032,334.26 was paid for pensions. The balance in the fund at the end of the year was $21,460.847.44.

The transfers for pension awards during the year included $89,998.85 transferred from Silicosis Account to provide for pensions in cases of silicosis in Class 5.

Disaster Reserve

The Disaster Reserve is a fund set aside under the provisions of Section 99 (2) of the Act to meet any unforseen disaster or other circumstance which might unduly burden the employers in any class of industry. The fund has been accumulated by a transfer of one per cent. of the gross assessments up to the end of 1922, and for the year 1928. These are the only moneys set aside or held by the Board which do not directly cover liabilities actually incurred by reason of accidents which have already happened.

The standing of the Disaster Reserve is shown in Table 11. The balance at the end of 1936 was $270.501.44, $9,673.56 interest being added to the $282,280.03 in the fund at the beginning of the year, and $21.452.15 being withdrawn to meet the cost of compensation to workmen previously disabled.

Compensation Deferred

The funds included under "Compensation Deferred" comprise compensation moneys held at interest for claimants in Schedule 1, payment being deferred to a future time by reason of the claimant being a minor or for other reasons. The condition of the fund is shown in Table 12.

At the beginning of the year the amount on hand was $37.496.47; deferred awards during the year amounted to $19,278.12, and $1,065.93 interest was added during the year; the payments during the year amounted to $20.873.35, of which $19.892.95 was for principal and $980.40 for interest, leaving a balance of $36,967.17 at the end of the year.

Silicosis Account

Table 13 gives particulars of the Silicosis Account which was established to take care of special assessments and payments in Class 5 necessitated by the addition of "Silicosis" contracted in mining operations to the list of industrial diseases under the Act, by amendment effective April 8, 1926.

The balance in the account at the beginning of 1936 was $1,422,146.24; $215.727.96 was collected by assessment; $141,700.43 was paid for compensation; $12,589.35 for medical aid; $54.377.42 for salaries and expenses in connection with examination of underground mine workers; $2.728.85 for salaries and expenses of Referee Board; and $2,855.31 was transferred to the Accident Fund for expenses of supervision. The surplus in the account December 31, 1936, was $1,423,622.84.

Investments

Particulars of the Board's investments are given in Table 14.

The total invested at the end of the year in Schedule 1 was $27.747,395.50.

consisting of $25,230,692.81 value of investments at the beginning of the year, $7,261,715.56 invested during the year, less $4,745,012.87 principal returned.

Particulars of each investment are shown in the list, including kind of investment, particular security, yield of interest (on book value), term, par value, and book value.

With the exception of short date deposits of current funds intended for use before the current year's assessments are received, all investments consist of Province of Ontario bonds, municipal or municipally-guaranteed debentures, and Dominion of Canada guaranteed bonds.

The average rate of interest received on permanent investments in Schedule 1 during 1936 was approximately 4.14 per cent., as compared with 4.75 per cent. in 1935, and 4.92 per cent. received during 1934. A nominal one per cent. is received on current bank balances.

Schedule 2 Funds

The funds handled by the Board in respect of Schedule 2 industries include employers' deposits for pensions required to be made with the Board under the provisions of Section 28 of the Act, temporary deposits or advances of money made by employers under Section 32 to facilitate prompt payment of claims, and claimants' moneys held by the Board in cases of awards, payment of which by reason of the claimant being a minor or for other reason is deferred to a future time.

The standing of Schedule 2 funds at December 31, 1936, is shown in the latter part of Table 9, and the particulars and a list of Schedule 2 investments are given in Table 14.

At the end of 1936 the deposits held under Section 28 amounted to $3,389,307.54; deposits under Section 32 to $53,439.51; and the amount of claimants' moneys held by the Board was $16,907.03, and $158,943.68 reserve for depreciation of securities, making a total of $3,618,597.76, of which $3,550,185.43 was held in permanent investments and $68,412.33 cash in bank.

The rate of interest on Schedule 2 Funds during 1936 was 5.356 per cent., as compared with 5.45 per cent. during 1935, and 5.71 per cent. during 1934.

TABLE 9

STANDING SCHEDULE 1 ACCIDENT FUND AS AT DECEMBER 31, 1936

Assets

Cash in Banks:		
Canadian Bank of Commerce	$4.775 44	
Royal Bank of Canada	22.815 58	
Dominion Bank	180,518 54	
		$208.109 56
Short Date Deposits		300,000 00
Investments		27,447.395 50
Due from Schedule 2 Employers for Administration Expenses paid out of Schedule 1 Funds		26.614 17
Due from Dominion of Canada for Administration Expenses paid out of Schedule 1 Funds		21.385 99
Due from Province of Ontario for Administration Expenses paid out of Schedule 1 Funds		11,896 42
Due from Rehabilitation Clinic for Administration Expenses paid out of Schedule 1 Funds		1.000 00
Assessments Estimated to be Due on Adjustment of 1936 Pay Rolls (see Table 1)		1,259,375 00
		$29.275.776 64

Liabilities

Compensation Deferred, other than Pensions		$36,967 17
Pension Liability		21.460.847 44
Balance of Silicosis Account at Credit of Employers		1,423,622 84
Balance at Credit of Rehabilitation Clinic		2,549 87
Compensation Estimated Outstanding for 1936 Accidents		2.111,540 64
Medical Aid Estimated Outstanding for 1936 Accidents		391,128 68
Estimated to Complete Prior Years' Accidents		980,340 59
Assets in Excess of Liabilities:		
Disaster Reserve	$270.501 44	
Reserve for Depreciation of Securities	509.218 81	
Balance at Credit of Classes (see Table 1)	2,089,059 16	
		2,868,779 41
		$29.275.776 64

STANDING SCHEDULE 2 FUNDS AS AT DECEMBER 31, 1936

Assets

Cash in Imperial Bank of Canada	$68,412 33
Investments	3.550,185 43
	$3.618.597 76

Liabilities

Balance Employers' Deposits under Section 28	$3,389,307 54
Balance Employers' Deposits under Section 32	53,439 51
Claimants' Moneys held by Board	16,907 03
Reserve for Depreciation of Securities	158,943 68
	$3.618.597 76

TABLE 10

PENSION FUND, SCHEDULE 1 BY CLASSES, DECEMBER 31, 1936

Class	Balance Forward from 1935	Pension Awards during 1936	Interest Received	Pension Payments	Balance as at Dec. 31, 1936	Class
	$ c.	$ c.	$ c.	$ c.	$ c.	
1	1,911,502 45	103,911 58	93,735 98	177,477 12	1,931,672 89	1
2	1,032,335 65	53,414 89	50,593 57	94,343 27	1,042,000 84	2
3	269,918 14	18,224 48	13,303 10	25,936 96	275,508 76	3
4	663,011 25	23,076 25	32,062 41	66,602 26	651,547 65	4
5	3,122,788 67	*440,031 87	158,900 94	329,571 56	3,392,149 92	5
6	860,660 88	54,826 51	42,212 13	87,663 19	870,036 36	6
7	564,187 73	29,106 16	27,447 60	59,577 65	561,163 84	7
8	407,982 11	39,602 96	20,350 90	41,531 30	426,404 67	8
9	919,199 43	28,419 11	44,456 85	88,543 81	903,531 58	9
10	1,051,175 79	73,969 82	52,094 88	92,527 82	1,084,712 67	10
11	908,589 51	52,643 25	44,616 47	85,163 37	920,685 86	11
12	653,258 02	83,100 75	32,988 41	70,080 56	699,266 62	12
13	477,188 49	32,284 50	23,612 30	42,169 41	490,915 88	13
14	215,979 43	20,511 75	10,753 51	22,330 14	224,914 55	14
15	838,820 69	99,488 93	42,222 58	88,227 04	892,305 16	15
16	511,771 09	54,470 74	25,822 40	45,116 94	546,947 29	16
17	415,456 22	32,303 65	20,607 12	38,931 16	429,435 83	17
18	167,234 79	35,393 97	8,800 79	17,831 94	193,597 61	18
19	313,703 24	15,389 24	15,324 25	29,825 78	314,590 95	19
20	648,133 16	99,007 38	33,368 39	60,538 10	719,970 83	20
21	946,998 36	60,812 84	46,582 95	91,489 76	962,904 39	21
22	393,419 34	16,627 50	19,061 23	41,017 19	388,090 88	22
23	1,251,689 01	54,489 54	61,196 77	109,996 82	1,257,378 50	23
24	2,087,796 82	312,599 40	106,558 80	225,841 11	2,281,113 91	24
	20,632,800 27	1,833,707 10	1,026,674 33	2,032,334 26	21,460,847 44	

*Transferred from Silicosis Account, Class 5, $89,998.85.

Transferred within the Fund:	Class 10 to 16	54.99
	Class 12 to 10	11,718.00
	Class 15 to 1	2,263.00
	Class 21 to 15	99.92

TABLE 11

DISASTER RESERVE, DECEMBER 31, 1936

Balance in fund as at December 31, 1935		$282,280 03
Interest credited in 1936		9,673 56
		$291,953 59
Withdrawn account Class 10	$3,332 85	
Withdrawn account Class 12	9,752 06	
Withdrawn account Class 24	8,367 24	
		21,452 15
Balance as at December 31, 1936		$270,501 44

RESERVE FOR DEPRECIATION OF SECURITIES

Profit on sale of investments	$400,369 25
Interest	108,849 56
Balance as at December 31, 1936	$509,218 81

TABLE 12

COMPENSATION DEFERRED, DECEMBER 31, 1936

Balance in fund, December 31, 1935		$37,496 47
Compensation awarded, payment deferred, during 1936		19,278 12
Interest credited in 1936		1,065 93
		$57,840 52
Paid claimants during 1936:		
Principal	$19,892 95	
Interest	980 40	
		20,873 35
Balance as at December 31, 1936		$36,967 17

TABLE 13

SILICOSIS ACCOUNT, DECEMBER 31, 1936

Balance in fund, December 31, 1935		$1,422,146 24
Assessments collected under Class 5		215,727 96
		$1,637,874 20
Payments made:		
Compensation	$141,700 43	
Medical Aid	12,589 35	
Salaries and Expenses	54,377 42	
To Accident Fund for Supervision	2,855 31	
Salaries and Expenses of Referee Board	2,728 85	
		214,251 36
Balance December 31, 1936		$1,423,622 84

TABLE 14

INVESTMENTS, DECEMBER 31, 1936

Schedule 1

Book Value of Investments, January 1, 1936	$25,230,692 81
Invested during the year	7,261,715 56
	$32,492,408 37
Less Principal returned	4,745,012 87
BOOK VALUE OF INVESTMENTS, DECEMBER 31, 1936	$27,747,395 50

Schedule 2

Book Value of Investments, January 1, 1936	$3,428,540 71
Invested during the year	968,094 11
	$4,396,634 82
Less Principal returned	846,449 39
BOOK VALUE OF INVESTMENTS, DECEMBER 31, 1936	$3,550,185 43

LIST OF INVESTMENTS

SCHEDULE 1 FUNDS

Municipal Debentures

Security	Face Rate	Term	Par Value	Book Value
			$ c.	$ c.
Amherstburg	6%	1937-1938	3,996 09	4,024 25
Belleville:	6%	May 15, 1941	65,000 00	64,374 14
	6%	Apr. 5, 1942	13,000 00	13,397 26
	6%	Jan. 2, 1942	14,000 00	14,393 72
	5½%	May 1, 1952	120,000 00	122,520 67
	4½%	1943-1954	156,000 00	148,621 67
	5%	1947-1949	20,000 00	19,490 85
	5%	1946-1960	147,388 05	137,356 54
	5%	1946-1950	17,856 38	16,699 93
	5%	1945-1959	24,545 76	22,882 98
Bowmanville	5%	1945-1949	41,035 25	40,125 75
Brampton	4½%	1937-1944	1,469 41	1,412 80
Brantford:	4½%	Dec. 31, 1942	10,000 00	9,135 84
	5½%	1937-1939	18,750 00	18,509 87
	6%	1937-1947	52,200 00	52,266 01
	5%	1940-1949	53,000 00	51,138 42
	5½%	1941-1953	13,000 00	13,586 58
	4%	Dec. 31, 1950	5,000 00	4,500 88
Bridgeburg	5½%	1950-1956	13,403 01	14,214 36
Burlington	5%	1942-1951	10,843 18	11,021 36
Capreol	6%	1951-1958	18,000 00	18,407 92
Carleton Place	5½%	1937-1941	9,239 34	9,239 34
Collingwood (guaranteed by County of Simcoe)	5%	1947-1951	191,000 00	182,994 83
Dundas	5½%	1937-1946	12,965 69	13,031 55
East York:	5%	1940-1965	172,187 29	163,064 13
	5%	1940-1965	72,105 65	68,301 81
Essex, Village	5%	1933-1934	1,266 00	1,256 46
Essex Border Utilities Commission	5½%	1942-1956	199,989 88	200,333 79
Etobicoke. Twp.:	5½%	1946-1949	45,000 00	46,879 41
	5%	1940-1957	25,277 74	25,375 64
	5%	1941-1957	71,000 00	69,747 69
	5%	1940-1958	28,416 47	28,532 74
	5%	1937-1948	91,071 95	85,062 01
Fort Erie:	5½%	1945-1961	50,715 22	53,540 64
	5½%	1944-1961	23,621 00	24,736 19
Fort William:	5%	Feb. 1, 1941	25,000 00	23,873 90
	6%	May 1, 1950	10,000 00	9,640 78
	5%	Apr. 1, 1955	55,000 00	54,189 07
	5%	1946-1951	69,924 85	70,479 47
	5%	July 1, 1952	34,672 60	35,008 85
	5%	July 1, 1947	42,751 00	43,064 17
	5%	Jan. 1, 1957	30,000 00	31,158 64
	5%	Apr. 1, 1959	76,000 00	75,288 08
Fort William (Guaranteeing McKellar Hospital)	4½%	May 1, 1948	88,000 00	87,027 24
Forest Hill Village:	5%	1943-1957	44,730 93	44,564 87
	5%	1937-1939	18,452 11	18,359 45
	5%	1940-1959	121,602 70	114,687 79
Galt:	5, 5½ & 6%	Dec. 6, 1961	19,284 69	18,500 29
	5½%	1937-1943	62,733 79	63,175 53
	5½%	Dec. 1, 1962	68,400 36	71,307 91
	6%	Dec. 1, 1962	14,135 90	15,738 24
	5½%	Dec. 15, 1964	14,097 18	15,265 17
	5½%	July 2, 1965	35,254 75	37,637 93
Glencoe:	5½%	1937-1940	5,279 55	5,130 56
	5½%	May 1, 1959	70,000 00	71,551 76

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value		Book Value	
			$	c.	$	c.
Guelph:	5½%	1940-1944	13,287	11	12,971	19
	5%	June 30, 1942	75,000	00	74.350	47
	5%	June 30, 1938	20,000	00	19,947	62
	5%	June 30, 1942	11.000	00	11,044	75
	4%	Dec. 31, 1953	46,441	00	40,428	87
Hamilton:	5%	June 1, 1937	3,056	87	3,043	45
	5½%	Feb. 1, 1939	4.726	76	4.740	32
	6%	1937-1940	41.215	32	41.215	32
	6%	1937-1941	100.838	18	101,104	01
	5%	1941-1945	44.000	00	42,169	49
	4½%	1938-1945	190.000	00	180.595	64
	4½%	1938-1945	77.000	00	73.325	39
	4½%	1940-1945	97.000	00	94.324	21
	4½%	1943-1947	31.000	00	29,925	76
	5%	1947-1949	54.000	00	53,702	00
	5%	1947-1949	104,000	00	103,426	49
	5%	1947-1949	6,000	00	5,967	41
	5%	1947-1949	2,000	00	1,989	13
	4½%	1946-1948	19.000	00	18,124	72
	4½%	1946-1949	42.000	00	40.055	11
	4½%	1946-1948	47.000	00	44.847	87
	4½%	1946-1948	55.000	00	52.391	89
	4½%	1946-1948	32.000	00	30.481	26
	4½%	1946-1948	9.000	00	8.573	78
	4½%	1946-1948	16.000	00	15.241	05
	4½%	1946-1949	82.000	00	78.105	89
	4½%	1946-1949	51.000	00	48.576	72
	5%	Jan. 2, 1945	43.000	00	42.859	00
	5%	Feb. 1, 1945	26,000	00	25.914	61
	5%	Apr. 1, 1945	16.000	00	15.947	52
	5%	June 1, 1945	55.000	00	54.819	65
	5%	May 1, 1945	32.000	00	31.895	05
	6%	1943-1952	170.000	00	169.827	85
	6%	Apr. 1, 1950	26.000	00	27.100	86
	6%	Apr. 1, 1952	17.000	00	17.754	89
	4½%	Feb. 1, 1945	50.000	00	48.120	03
	5%	1959-1963	50,000	00	50,353	09
	5%	Jan. 2, 1942	3.000	00	2.973	90
	5%	Apr. 1, 1945	3.000	00	2.959	20
	4½%	July 3, 1942	5.000	00	4.834	50
	4½%	Dec. 1, 1942	4.000	00	3.857	20
	4½%	Feb. 1, 1944	4.000	00	3.828	00
	5%	1950-1951	28.000	00	27.480	83
	5%	1952-1953	100.000	00	93.073	31
	5%	Apr. 1, 1951	22.000	00	21.588	41
Hanover	5½%	1945-1959	65.703	97	66.979	60
Hawkesbury	6%	1933-1940	51,432	34	48.982	22
Kenora	5%	1937-1956	52.400	00	50.967	80
Kingston:	6%	1937-1948	4.000	00	3.984	85
	6%	1939-1945	35.300	00	35,110	83
Kingsville	6½%	1934-1941	33.155	59	33,024	27
Kitchener:	5½%	1943-1951	47.682	18	48.628	70
	5½%	1943-1952	28.490	33	29.068	30
	5½%	1937-1946	677	49	669	56
Leaside	5½%	1933-1949	96.000	00	92.887	52
Listowel	5½%	1937-1947	11.135	35	10.922	29
London:	4½%	1937-1938	11.000	00	10.871	46
	5½%	1940-1941	15.000	00	15.091	59
	5½%	1937-1941	75.000	00	75.287	10
	5%	1938-1942	45.000	00	45.080	79
	5%	1939-1945	26.000	00	26.050	29
	5%	1946-1950	58.000	00	58.889	84

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value	Book Value
			$ c.	$ c.
Midland (guaranteed by County of Simcoe):	5½%	1940-1947	14,339 86	14,957 36
	5½%	1940-1944	10,720 05	11,126 80
	5%	1940-1947	36,422 68	36,516 27
	5%	1940-1957	47,160 21	47,305 06
Mimico:	5½%	1935-1960	62,940 45	62,103 45
	5%	1935-1950	36.525 33	34,673 72
	5½%	1933-1961	46.134 66	48.226 05
Mount Forest	5%	1945-1948	26.183 59	25,766 94
Napanee	5%	1941-1943	14,623 28	14,763 54
Niagara Falls:	5%	1938-1945	50.548 31	47,313 07
	6%	1934-1941	59.553 78	59,010 00
	5½%	1940-1953	54.098 50	54,903 78
	5%	1938-1952	16.139 50	15.782 46
North Bay:	5%	1938-1942	1.788 66	1.747 64
	6%	1937-1942	76.276 50	76,996 63
	5%	1937-1947	42.775 84	43,312 00
	5½%	1939-1948	152.370 42	156.239 61
	4½%	1937-1943	17.558 14	17,398 65
Northumberland & Durham, United Counties of	5%	1937-1948	40,451 63	39,719 94
North Toronto (City of Toronto)	4½%	1937-1942	15.832 48	15.162 67
North York, Twp.:	5½%	1940 & 1941	8.500 00	8,736 55
	5½%	1940-1944	17.866 71	18.483 51
	5½%	1940-1943	25.811 14	26,654 63
	5½%	1943-1957	36.885 12	39,142 36
	5%	1940-1948	47,687 13	48,587 88
	5½%	1940-1958	24,469 63	26.132 22
Orillia (guaranteed by County of Simcoe)	5%	1941-1954	17.156 14	17.223 69
Oshawa:	6%	1945-1951	45.133 48	43.680 00
	5%	June 1, 1938	6.068 02	6.025 41
	5%	1939-1943	78.000 00	76.908 83
	5½%	1945-1949	100.000 00	98,785 40
Ottawa:	4%	July 1, 1939	10.800 00	10.261 04
	6%	July 1, 1951	15,000 00	16.617 03
	5½%	1951 & 1961	226.000 00	225.595 43
	5½%	July 1. 1961	114.000 00	113.390 82
	5½%	July 1, 1961	46.000 00	45.858 43
Parry Sound:	6%	1937-1944	8.567 13	8,454 21
	6%	1937-1950	50.235 30	46.844 62
Pembroke	5%	1946-1954	75.025 53	75,025 53
Perth:	5%	1940-1947	52.000 00	52,160 28
	5%	1940-1948	91.000 00	92.270 75
	5%	1945-1950	21,000 00	20.828 37
Peterborough:	6¼%	Dec. 31, 1940	50.000 00	50,000 00
	4½%	June 30, 1951	50.000 00	43.462 37
Port Arthur:	5%	June 1, 1959	50.000 00	48.683 98
	5½%	June 1. 1948	53.000 00	49.222 68
Port Arthur (guaranteeing General Hospital):	5½%	Nov. 1. 1955	100.000 00	104.516 64
	5½%	Oct. 1, 1954	40.000 00	41.629 93
Preston	5½%	Feb. 15, 1937	736 44	729 17
Renfrew:	6%	1937-1947	5.520 18	5.562 71
	5%	1947-1958	55.034 42	55.350 08
Richmond Hill	5½%	1937-1944	4.358 56	4.358 56
St. Catharines:	6½%	1937-1940	10.000 00	10.039 87
	6¼%	1937-1940	11.600 00	11.585 22
	6%	1937-1942	16.500 00	16.743 15

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value		Book Value	
			$	c.	$	c.
St. Marys:	5%	Oct. 31, 1943	4,870	30	4,738	34
	5%	Jan. 1, 1944	2,500	00	2,428	75
St. Thomas:	6%	1949-1951	44,646	59	43,145	62
	5½%	1938 & 1939	3,387	15	3,309	26
	6%	May 20, 1937	19,000	00	19,054	72
Sandwich:	6%	1933-1935	2,070	76	2,085	28
	6%	1932-1943	18,392	05	17,758	63
	6%	1938-1940	6,774	32	6,547	79
	6%	1932-1949	41,737	53	40,112	96
	5½%	1944-1955	78,106	11	78,248	85
	5½%	1944-1947	11,000	00	10,911	68
	5½%	1944-1958	313,879	39	323,318	64
	5½%	1945-1960	126,694	20	126,694	20
Sandwich West, Twp.	6%	1933-1948	80,272	18	85,913	94
Sarnia:	5½%	1937-1939	1,528	96	1,496	37
	5%	1942-1947	62,914	68	61,977	54
Sault Ste. Marie:	6%	Mar. 25, 1949	24,771	50	25,876	57
	5½%	Apr. 1, 1950	45,000	00	41,355	90
	5½%	Jan. 20, 1945	6,000	00	6,165	16
	5½%	Jan. 20, 1945	4,000	00	4,067	86
	5½%	1937-1942	29,500	00	29,712	03
	5%	June 1, 1949	3,900	00	3,811	44
	5½%	Dec. 15, 1949	5,000	00	5,116	71
Scarborough, Twp.:	5%	1940-1943	25,000	00	25,515	23
	5%	1942-1958	75,474	03	72,308	64
	5%	1933-1940	25,689	23	25,341	22
Simcoe	6%	1937-1945	4,101	32	4,190	63
Sioux Lookout	6%	1944-1947	4,000	00	4,000	00
Smith's Falls:	5½%	1937-1944	2,549	95	2,549	95
	6%	1937-1946	10,159	38	10,404	33
	5½%	May 1, 1937	459	57	457	27
	5½%	1937-1947	8,677	86	8,553	15
	5%	1940-1945	64,306	49	64,232	19
	5%	1944-1946	54,000	00	54,000	00
Stratford:	5%	Jan. 1, 1945	25,000	00	24,207	77
	5%	Jan. 1, 1945	15,000	00	14,525	84
	5%	Jan. 1, 1945	10,000	00	9,683	11
	5%	Jan. 1, 1945	13,000	00	12,480	97
	6%	Jan. 1, 1951	40,000	00	39,068	06
	6%	Jan. 1, 1942	124,000	00	127,221	96
	5½%	Jan. 1, 1942	50,000	00	50,216	62
	5½%	Jan. 1, 1952	13,000	00	13,127	02
	5%	June 15, 1940	7,000	00	7,012	49
	5%	June 15, 1955	30,000	00	30,185	58
	5%	Jan. 1, 1945	2,000	00	2,011	02
Sudbury:	5%	1934-1937	18,321	43	18,232	67
	5%	1940-1949	49,943	48	48,285	79
	5%	1945-1948	66,235	66	65,961	07
Thorold	5%	Aug. 15, 1958	3,000	00	2,945	55
Tillsonburg:	5½%	Mar. 20, 1945	975	00	975	00
	5½%	1937-1944	653	77	653	77
Toronto:	4½%	July 1, 1948	4,000	00	3,485	00
	4½%	Jan. 1, 1955	19,000	00	15,851	34
	5½%	Apr. 1, 1937	10,000	00	9,977	28
	6%	1945-1949	39,000	00	39,000	00
	5½%	1945-1947	11,000	00	10,604	18
	6%	1943-1951	48,000	00	48,000	00
	5½%	1940-1951	41,000	00	41,775	88
	5%	Apr. 1, 1951	50,000	00	48,738	89
	6%	1945-1951	9,000	00	9,716	87
	5%	July 1, 1950	20,000	00	20,146	98

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value		Book Value	
			$	c.	$	c.
Toronto:	5%	Apr. 1, 1950	25,000	00	25,183	71
	4½%	July 1, 1944	10,000	00	9,528	70
	4½%	June 1, 1946	7,000	00	6,763	54
	4½%	1944-1945	12,000	00	11,643	86
	5%	1947-1951	61,000	00	61,280	71
	4½%	1944-1948	26.000	00	25,185	75
	5½%	Mar. 1, 1949	2,000	00	2,111	18
	6%	June 1, 1950	10,000	00	11,161	13
	5½%	1946-1958	53,000	00	53,905	63
	5½%	1953 & 1957	55,000	00	54.068	47
	5½%	1941-1947	35,000	00	34.534	52
	5½%	1958-1962	125,000	00	123,075	44
	5½%	1943-1941	17,000	00	16.804	07
	5½%	1948-1950	89,000	00	90,809	60
	5½%	1945-1952	27,000	00	25,761	60
	5%	July 1, 1946	30.000	00	29,971	20
	5½%	Apr. 1, 1952	5,000	00	5,212	46
	5½%	1950 & 1951	15,000	00	15,630	76
	5½%	Apr. 1, 1951	11,000	00	11.504	54
	4½%	Aug. 1, 1951	28.000	00	25.863	10
	6%	1946-1951	20,000	00	21,759	31
	6%	July 1, 1951	10.000	00	10,027	09
	6%	1943 & 1945	40.000	00	38,417	71
Toronto Harbour Commission (guaranteed by City of Toronto)	4½%	Sept. 1, 1953	14,000	00	13,049	61
Toronto, Twp.	5½%	1941-1952	18,104	29	18,958	74
Trenton	5½%	1942-1953	25,000	00	25.687	08
Walkerville:	6%	1934-1942	20.218	58	19.872	72
	5½%	1942-1948	17.531	70	16.527	69
	6%	1949-1951	99,038	43	109,328	76
	5%	1942-1947	25,511	95	26,055	10
Walkerville-East Windsor Water Commission	5½%	1947-1959	291,476	32	303,077	11
Welland, City	6%	Apr. 1, 1939	42,000	00	42.533	28
Welland, County	5%	Dec. 15, 1945	10.000	00	9,734	74
Weston	6%	1949-1952	24.949	65	27,714	01
West Gwillimbury (guaranteed by County of Simcoe)	5½%	1942-1956	36.107	36	36.240	89
Wheatley	5½%	1951-1960	22.892	29	23,584	78
Whitby:	5½%	1937-1946	8,018	03	8,066	27
	5½%	1937-1946	2,904	32	2,922	50
	5½%	1937-1946	3.630	44	3.662	67
Windsor:	5½%	1932-1935	11,665	41	11,654	25
	6%	1942-1950	200.257	35	192.643	60
	6%	1938-1940	32,977	61	32,877	74
	6%	Sept. 15, 1941	12.337	43	12.252	21
	6%	June 1, 1940	13.000	00	12,961	26
	5½%	1946-1952	110.000	00	112,106	51
	6%	June 1, 1951	24,000	00	26.564	79
	4½%	1944-1950	163,000	00	155.283	31
	5%	1943-1949	37.000	49	37,186	00
Woodstock	4½%	Nov. 30, 1937	6.000	00	5,941	49
York, Twp.:	5%	1941-1946	100.000	00	100.298	01
	6%	1941-1951	102.407	13	105.792	73
	5%	1949-1956	225,000	00	214.721	81
	5%	1942-1946	195.000	00	195,313	67
	5%	1945-1956	110.295	98	103,061	14
	5%	1945-1955	22,000	00	22,000	00
	5%	Feb. 1, 1952	25.000	00	25,437	71
	5½%	1941-1949	20.731	26	21,845	28

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value		Book Value	
			$	c.	$	c.
York, Twp.:	6%	1941-1952	8.679	27	9,515	22
	6%	1941-1952	27,659	28	30,387	50
	5%	1945-1958	74.000	00	73,284	00
York Twp. (guar. by County of York):	5%	1951-1956	93.000	00	88,871	23
	5%	1946-1957	21.000	00	21,111	69
			12.626.492	52	12,529,522	18

Other Permanent Investments

Security	Face Rate	Term	Par Value		Book Value	
Canadian National Railways Guaranteed by Dominion of Canada):	5%	Feb. 1. 1954	100,000	00	104.288	22
	5%	Feb. 1, 1954	50.000	00	52,079	89
	5%	Feb. 1. 1954	80.000	00	77,170	15
	5%	Feb. 1. 1954	36.000	00	34.579	73
	5%	Feb. 1. 1954	121.000	00	117,859	33
	5%	Feb. 1. 1954	247.000	00	241.634	13
	5%	Feb. 1. 1954	50.000	00	51.836	42
	5%	Feb. 1. 1954	23.000	00	23.860	97
	5%	Feb. 1. 1954	50.000	00	52,079	89
	5%	Feb. 1. 1954	50.000	00	51,922	84
	5%	Feb. 1. 1954	60,000	00	62,307	41
	5%	Feb. 1, 1954	25.000	00	25,990	81
	5%	Feb. 1. 1954	90.000	00	93,477	11
	5%	Feb. 1. 1954	463.000	00	452,933	39
	5%	Feb. 1. 1954	40.000	00	35.329	25
	5%	Feb. 1. 1954	115.000	00	133,741	15
	5%	Feb. 1. 1954	100.000	00	117.152	39
	5%	Feb. 1. 1954	43.000	00	50.060	13
	5%	Feb. 1. 1954	40.000	00	47.056	52
	4½%	July 1, 1957	100.000	00	111.384	33
	4½%	July 1. 1957	75.000	00	83.357	05
	4½%	July 1, 1957	100.000	00	111.384	31
	4½%	July 1, 1957	100.000	00	111.263	51
	4½%	July 1. 1957	100.000	00	111.505	11
	4½%	July 1. 1957	250.000	00	279.366	56
	4½%	July 1. 1957	60,000	00	67.265	31
	4½%	July 1. 1957	100,000	00	112.591	79
	4½%	July 1. 1957	120,000	00	135.866	10
	4½%	July 1. 1957	65.000	00	73,498	44
	4½%	July 1. 1957	75.000	00	83.994	30
	4½%	July 1. 1957	244.000	00	276.258	48
	4½%	July 1. 1957	52.000	00	59.560	13
	4½%	July 1. 1957	100.000	00	116,144	00
	4½%	July 1. 1957	117.000	00	134.364	11
	4½%	July 1. 1957	25.000	00	28.937	50
Dominion of Canada:	4½%	Nov. 1. 1948/58	465.000	00	498,585	22
	4½%	Nov. 1, 1948/58	30.000	00	32.612	63
	4½%	Nov. 1. 1948/58	100.000	00	109,148	30
	4½%	Nov. 1, 1948/58	50.000	00	54,690	99
	4½%	Nov. 1, 1948/58	200.000	00	218,670	42
	4½%	Nov. 1, 1949/59	100.000	00	109.673	95
	4½%	Nov. 1. 1949/59	135.000	00	153.139	42
	4½%	Nov. 1. 1949/59	59.000	00	67.104	58

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value		Book Value	
			$	c.	$	c.
Province of Ontario:	6%	Feb. 1, 1941	50,000	00	50,244	97
	5½%	Dec. 1, 1942	115,000	00	119,150	27
	5½%	Dec. 1, 1942	10,000	00	9,876	59
	5½%	Dec. 1, 1942	95,000	00	100,877	10
	6%	Sept. 15, 1943	108,000	00	99,191	09
	6%	Sept. 15, 1943	50,000	00	52,923	83
	6%	Sept. 15, 1943	185,000	00	196,936	75
	6%	Sept. 15, 1943	9,000	00	9,608	52
	6%	Sept. 15, 1943	57,500	00	61,385	44
	6%	Sept. 15, 1943	30,000	00	32,034	73
	6%	Sept. 15, 1943	30,000	00	32,028	33
	6%	Sept. 15, 1943	7,000	00	7,515	42
	5½%	July 1, 1946	250,000	00	239,304	55
	5½%	July 1, 1946	100,000	00	96,492	73
	5½%	July 1, 1946	115,000	00	113,953	15
	5½%	July 1, 1946	461,000	00	444,917	95
	5½%	July 1, 1946	200,000	00	223,073	94
	5½%	July 1, 1946	25,000	00	27,893	18
	5½%	July 1, 1946	15,000	00	16,763	82
	5½%	July 1, 1946	34,000	00	38,356	55
	4½%	Dec. 1, 1947	13,000	00	12,068	43
	5½%	Feb. 1, 1947	226,000	00	226,697	78
	5½%	Feb. 1, 1947	125,000	00	120,083	49
	5½%	Feb. 1, 1947	145,000	00	146,183	82
	5½%	Feb. 1, 1947	116,000	00	116,658	84
	5½%	Feb. 1, 1947	10,000	00	9,709	22
	5½%	Feb. 1, 1947	100,000	00	99,651	85
	5½%	Feb. 1, 1947	91,500	00	95,331	29
	5½%	Feb. 1, 1947	50,000	00	53,729	08
	5½%	Feb. 1, 1947	35,000	00	39,351	73
	5½%	Feb. 1, 1947	62,000	00	69,807	69
	5½%	Feb. 1, 1947	10,000	00	11,237	13
	5½%	Feb. 1, 1947	150,000	00	170,515	43
	5½%	Feb. 1, 1947	25,000	00	28,304	01
	5½%	Feb. 1, 1947	25,000	00	29,050	00
	5%	Oct. 15, 1948	250,000	00	246,067	55
	5%	Oct. 15, 1948	50,000	00	50,565	61
	5%	Oct. 15, 1948	60,000	00	60,675	36
	5%	Oct. 15, 1948	25,000	00	25,290	28
	5%	Oct. 15, 1948	50,000	00	50,563	05
	5%	Oct. 15, 1948	50,000	00	51,002	20
	5%	Oct. 15, 1948	50,000	00	48,957	22
	5%	Oct. 15, 1948	50,000	00	57,297	00
	5%	Oct. 15, 1948	79,000	00	90,430	15
	4½%	Jan. 16, 1949	158,000	00	143,544	42
	4½%	Jan. 16, 1949	207,000	00	187,147	28
	4½%	Jan. 16, 1949	25,000	00	26,443	24
	4½%	Jan. 16, 1949	83,000	00	79,191	88
	4½%	Dec. 1, 1949	300,000	00	273,476	68
	4½%	June 1, 1950	50,000	00	52,857	56
	4½%	June 1, 1950	290,000	00	320,979	26
	4½%	Dec. 1, 1950	700,000	00	635,507	51
	5%	Apr. 1, 1952	100,000	00	117,880	14
	4½%	Jan. 15, 1956	500,000	00	477,395	69
	4½%	May 15, 1957	10,000	00	11,142	43
	5%	May 1, 1959	250,000	00	249,456	17
	5%	May 1, 1959	100,000	00	120,375	00
	4½%	May 15, 1961	29,000	00	33,635	43
	4%	May 15, 1962	50,000	00	52,964	89
	4½%	May 15, 1962	25,000	00	29,324	84
	4½%	Jan. 15, 1965	75,000	00	88,364	39
	4½%	Jan. 15, 1965	19,000	00	22,515	13
	4%	June 1, 1967	100,000	00	107,928	48

TABLE 14—Continued

Municipal Debentures—Continued

Security	Face Rate	Term	Par Value $	c.	Book Value $	c.
Province of Ontario:	4%	May 15, 1968	40,000	00	42,380	03
	4½%	May 15, 1968	50,000	00	58,874	31
	4½%	May 15, 1970	10,000	00	11,885	35
	4½%	Jan. 15, 1971	25,000	00	28,475	59
Province of Ontario guaranteed:						
Blind River, Town of	4½%	1937-1948	28,040	08	27,721	95
Englehart, Town of	6%	1945-1954	20,388	11	21,571	43
Hydro Electric Power Com'n:	6%	June 24, 1941	40,000	00	42,087	74
	5%	Sept. 1, 1943	26,000	00	23,402	86
	5%	Sept. 1, 1943	100,000	00	108,589	70
	5%	July 1, 1945	78,000	00	71,305	25
	5%	July 15, 1946	50,000	00	46,651	17
	5%	July 15, 1946	50,000	00	45,767	08
	4½%	Apr. 1, 1960	20,000	00	21,505	78
	4½%	Apr. 1, 1960	50,000	00	53,764	45
	4½%	Apr. 1, 1960	24,000	00	26,191	65
	4½%	Apr. 1, 1960	22,000	00	24,171	75
	4½%	Apr. 1, 1960	22,000	00	25,121	55
	6%	July 1, 1961	120,000	00	157,258	08
	6%	July 1, 1961	25,000	00	33,476	41
	4¾%	Jan. 1, 1970	95,000	00	91,175	03
	4¾%	Jan. 1, 1970	25,000	00	22,686	43
	4¾%	Jan. 1, 1970	41,000	00	46,053	16
	4¾%	Jan. 1, 1970	46,000	00	51,782	63
	4¾%	Jan. 1, 1970	154,000	00	173,491	45
	4¾%	Jan. 1, 1970	105,000	00	126,281	45
	4¾%	Jan. 1, 1970	13,000	00	15,580	08
	4¾%	Jan. 1, 1970	57,000	00	68,736	35
	4¾%	Jan. 1, 1970	66,000	00	79,671	19
	4¾%	Jan. 1, 1970	50,000	00	60,356	97
	4¾%	Jan. 1, 1970	33,000	00	39,999	10
	4¾%	Jan. 1, 1970	75,000	00	90,754	76
	4¾%	Jan. 1, 1970	38,500	00	46,665	48
	4¾%	Jan. 1, 1970	10,000	00	11,811	29
	4¾%	Jan. 1, 1970	49,000	00	57,920	70
	4¾%	Jan. 1, 1970	100,000	00	118,112	53
	4¾%	Jan. 1, 1970	63,000	00	74,879	44
Sandwich, Windsor and Amherstburg Railway	4½%	June 1, 1943	49,000	00	45,651	07
	4½%	June 1, 1943	25,000	00	26,072	72
Sturgeon Falls, Town of	6%	1946-1962	40,092	65	51,950	58
Teck, Twp. of	4½%	1937-1944	54,182	72	56,162	93
Temiskaming & Northern Ontario Railway:	4%	Feb. 1, 1956	70,000	00	73,267	91
	4%	Feb. 1, 1959	145,000	00	121,998	04
	4%	1958-1967	112,000	00	118,800	60
	4%	Feb. 1, 1963	33,000	00	34,834	16
	4%	1957-1968	55,000	00	58,239	05
	4%	1960-1965	31,000	00	32,762	42
	4%	Feb. 1, 1967	100,000	00	105,833	38
	4%	Feb. 1, 1967	35,000	00	38,438	10
Tisdale, Twp. of:	4%	1937-1945	114,588	63	116,977	31
	6%	1937-1944	36,864	99	39,165	86
	6%	1937-1941	22,738	72	23,956	08
University of Western Ontario	4½%	1942-1946	54,000	00	49,984	13
			14,268,395	90	14,917,873	32
TOTAL PERMANENT INVESTMENTS, SCHEDULE 1			26,894,888	42	27,447,395	50

TABLE 14—Continued

SCHEDULE 2 FUNDS

Municipal Debentures

Security	Face Rate	Term	Par Value $ c.	Book Value $ c.
Barton, Twp.	5½%	July 14, 1952	63.000 00	63.982 90
Belleville:	5%	1943-1945	3,450 26	3.310 85
	5%	1943-1950	8.000 00	7,618 62
	5%	1940-1946	10.488 47	10,087 66
Brantford	4%	Dec. 31, 1949	15.000 00	13,033 17
Chippawa, Town (Guaranteed by County of Welland)	5½%	1941-1944	22.578 30	22,546 15
Cornwall	5½%	1941-1943	10.248 45	10,225 78
Etobicoke, Twp.:	5%	1941-1955	24,867 79	23.840 47
	5%	1941-1956	32.574 89	32,407 89
	5½%	1942-1956	58,470 29	60,729 82
	5%	1948-1955	43.000 00	40,729 97
Galt	5%	Dec. 15, 1965	19,460 45	18,487 06
Hamilton:	4½%	1942-1946	152,000 00	140.990 34
	4½%	1942-1946	134,000 00	125.520 73
	5%	1942-1946	35,000 00	34,034 18
Kingston	5%	July 1, 1955	70.000 00	66.332 01
Kitchener	6%	1944-1947	10.418 06	10,826 84
London:	5%	Dec. 30, 1954	411.000 00	390,240 74
	5%	1940-1956	280.000 00	272,121 68
	5%	1940-1955	101.000 00	99,304 18
North Bay	5½%	1940-1943	33.000 00	32,523 25
Ottawa	5%	1941-1946	36.000 00	34.916 21
Peterborough	5%	Dec. 31, 1945	20.000 00	19,284 11
Renfrew	5⅓%	1949-1953	50,234 63	50.751 72
Stamford, Twp.	5½%	1941-1954	246.628 19	247.541 94
Stratford:	5.30%	July 1, 1954	82,000 00	82.925 25
	5%	1940-1956	122.613 19	117.861 54
Thorold	5%	1940-1959	49.546 82	46.910 51
Toronto:	6%	June 1, 1940	4.000 00	3.966 57
	6%	June 1, 1942	21.000 00	20.686 35
	6%	1940-1943	42.000 00	43.195 27
	5%	1950-1951	50,000 00	48,754 26
	4½%	Jan. 1, 1949	5.000 00	4.569 95
	5%	July 1, 1950	4,000 00	3,830 96
Victoria, Co.	5%	1951-1959	17.954 20	16.880 98
Waterloo, Town	5½%	1941-1947	19,195 72	18,992 32
York, Twp.	5%	1944-1961	214,197 93	198,768 86
			2,521.927 64	2,438.731 09

TABLE 14—Continued

Other Permanent Investments

Security	Face Rate	Term	Par Value		Book Value	
			$	c.	$	c.
Canadian National Railways (guaranteed by Dominion of Canada):	5%	Feb. 1, 1954	50,000	00	46,622	95
	5%	Feb. 1, 1954	50,000	00	59,559	93
Dominion of Canada:	4½%	Nov. 1, 1948/58	50,000	00	54,354	46
	4½%	Nov. 1, 1949/59	562,000	00	636,003	60
Hydro Electric Power Commission (guaranteed) by Province of Ontario):	6%	June 24, 1941	15,000	00	15,321	67
	4½%	Apr. 1, 1960	50,000	00	56,491	58
Province of Ontario:	5%	Oct. 1, 1942	31,000	00	30,181	61
	5%	Oct. 15, 1948	50,000	00	50,564	31
	5%	Apr. 1, 1952	19,000	00	18,258	55
	5%	Dec. 2, 1960	100,000	00	122,318	49
	4%	June 1, 1970/71	20,000	00	21,777	19
			997,000	00	1,111,454	34
TOTAL PERMANENT INVESTMENTS, SCHEDULE 2			3,518,927	64	3,550,185	43

SHORT DATE DEPOSIT, SCHEDULE 1

Province of Ontario Savings Bank	1½%	$300,000.

CHAPTER V

1935 OPERATIONS

This chapter deals with the year 1935, containing information which was not available when the report for that year was made.

It gives the final financial statement for Schedule 1 industries for the year, estimates of the adjustments of assessments and of the outstanding compensation and medical aid having to be used in the provisional statement given in Table 1 of the 1935 report; and it gives statistical information as to the accidents which happened during 1935, their causes, the nature of the injuries suffered, the number, time loss, total and average cost of the different classes of cases, and the age, wage, nationality, and marital condition of the injured workmen.

This information is contained in Tables 15 to 27.

Final Financial Statement, Schedule 1, 1935

Table 15 gives the final financial statement for Schedule 1 industries for 1935, provisional figures for which were given in Table 1 of the 1935 report. It shows the income and credits and the expenditures and charges and the balance for each class of industry; also the actual assessments and accident cost and other items of income and expenditure for each class, and the assessments and accident cost for each group of industry within the class. The list of industries included in each class and group will be found in the Board's rate book, the list of industries in the different classes is also printed with the Act, and their general nature is indicated at the bottom of Table 1 of this report.

The net incomes and credits for all the classes for the year were $5,303,098.77, and the net expenditures and charges, $4,834,139.20, leaving a surplus for the year of $468,959.57. Adding the surplus forward from prior years, $1.621.160.03. leaves a net actual surplus of $2.090.119.60, as compared with a provisional or estimated surplus of $749,703.29, the disparity being largely due to claims for accidents occurring in 1935 and prior years not being finally disposed of in 1936.

Assessments and Accident Cost

The assessments and accident cost (the latter comprising compensation and medical aid and payments on account of rehabilitation but not including payments from the Silicosis Account) in Schedule 1 for each year since the commencement of the Act, and the totals to the end of 1935, are as follows:

Year	Assessment	Accident Cost
1915	$1.831,537 52	$1.091,020 43
1916	2,361,463 20	1,880.004 37
1917	2,662.383 29	2,639.560 56
1918	3,303,575 83	3.214,427 57
1919	3.840.949 07	4.474.847 38
1920	5,579.333 45	5.041.947 30
1921	4,594.452 37	4.277,034 67
1922	3.984.594 64	4,323.801 07
1923	3.771.321 09	4.977,331 82
1924	4.524.700 86	4.746.314 60
1925	4.390.854 75	4.438,802 13
1926	5,167.126 64	4,711,970 90
1927	5.465.763 17	5,082.073 61
1928	6,739.696 80	6,083.772 14
1929	7.505,431 10	6.861.274 51
1930	6,396,105 73	5.925,502 17
1931	4,608.677 15	4.472.209 18
1932	3,292.309 25	3.177.386 47
1933	2.729.936 41	2.795,085 82
1934	4,192.200 35	3.904.134 13
1935	5.254,667 17	4,386,477 31
Totals	$92,197,079 84	$88.504,978 14

Pay Roll and Rates of Assessment

As assessments are in the form of a percentage of pay roll, the average rate paid by the employers in Schedule 1 can be determined by dividing the total assessments for the year by the total pay roll. The following table shows the total amount of pay roll and the total assessments and the average rate for $100 pay roll for each year:

Year	Total Pay Roll	Total Assessments	Average Rate per $100
1915	$147.603.000	$1.831.537 52	$1 24
1916	220.840.000	2,361.463 20	1 07
1917	286.903.000	2.662.383 29	93
1918	310,450.000	3.303,575 83	1 06
1919	325.226.000	3.840.949 07	1 18
1920	464,589.000	5.579,333 45	1 20
1921	355.259.000	4.594.452 37	1 29
1922	391.888.000	3.984.594 64	1 02
1923	434.163.000	3.771.321 09	87
1924	386.318,000	4,524.700 86	1 17
1925	390.652.000	4.390,854 75	1 04
1926	424.926.000	5.167.126 64	1 22
1927	455.016.000	5.465.763 17	1 20
1928	504.102.000	6.739.696 80	1 34
1929	559.429.000	7.505.431 10	1 34
1930	472.742.000	6.396.105 73	1 35
1931	389.740.000	4.608.677 15	1 18
1932	317.605.000	3.292.309 25	1 04
1933	288.917.000	2.729.936 41	94
1934	346.735,000	4.192.200 35	1 21
1935	386.782,000	5.254.667 17	1 36

Final Accident Figures, 1935

Table 16 shows the number of accidents happening in 1935 (in all industries under the Act) for which payment of compensation or medical aid was made. The total number was 52.128 of which 208 were death cases, 992 cases involving some degree of permanent disability, 23.024 temporary disability cases, and 27.904 cases which involved medical aid only. Schedule 2 cases involving medical aid only are not included, as in these cases medical aid is furnished directly by the employer.

The complete figures for each year since the commencement of the Act are as follows:

Year	Medical Aid Only	Temporary Disability	Permanent Disability	Death	Totals
1915	*	9.311	1.339	296	10.946
1916	*	15.993	2.232	373	18.598
1917	†4.267	21.556	2.475	370	28.668
1918	12.822	24,089	2.624	366	39.901
1919	11.769	22,418	2,457	364	37.008
1920	15.566	27.423	2.735	373	46.097
1921	12.141	22.855	2.079	331	37.406
1922	15.913	24.461	2.082	325	42.781
1923	20.125	28.954	2.340	327	51.746
1924	20.811	25.980	2.191	315	49.297
1925	22.444	26.040	2.157	264	50,905
1926	25.330	27.150	2.421	308	55.209
1927	27.852	28.836	2.476	311	59,475
1928	31,688	30.440	2.926	414	65.468
1929	34,582	32.920	3.372	417	71.291
1930	29.189	25.613	3.147	394	58.343
1931	21,970	20.543	2.495	231	45.239
1932	17,320	15.466	1.805	167	34.758
1933	17,258	14.235	1,511	159	33.163
1934	24,552	22.020	1.790	211	48,573
1935	27,904	23.024	992	208	52,128
Totals	393.503	489,327	47.646	6.524	937.000

* No Medical Aid † Half Year Only

Accident Frequencies, Schedule 1

Comparison of accident frequencies can be made by correlating the number of accidents with the total number of full-year workers. data for this being available. however, only in Schedule 1. Eliminating accidents in which medical aid only was paid. the number of accidents for each 100 full-year workers for the different years are:

Year	Temporary Disability	Permanent Disability	Death	Totals
1915	3.63	.58	.12	4.32
1916	4.99	.79	.10	5.88
1917	5.78	.72	.07	6.57
1918	5.81	.66	.07	6.54
1919	5.81	.68	.07	6.56
1920	6.23	.67	.07	6.97
1921	6.25	.60	.05	6.90
1922	5.82	.52	.06	6.40
1923	6.02	.51	.05	6.58
1924	6.08	.54	.06	6.68
1925	5.94	.51	.05	6.50
1926	5.84	.54	.05	6.43
1927	5.94	.53	.05	6.52
1928	5.85	.58	.07	6.50
1929	5.80	.61	.06	6.47
1930	5.08	.66	.07	5.81
1931	4.28	.56	.04	4.88
1932	3.59	.45	.03	4.07
1933	3.22	.37	.03	3.62
1934	3.94	.37	.04	4.35
1935	4.18	.19	.04	4.41

On the same basis of calculation. the frequency of medical aid only cases has been: 1918, 3.66; 1919. 3.70; 1920. 4.26; 1921, 4.24; 1922, 4.67; 1923. 4.95; 1924. 5.84; 1925. 6.09; 1926. 6.37; 1927. 6.73; 1928. 7.09; 1929. 7.06; 1930, 6.84; 1931, 5.72; 1932. 5.06; 1933, 4.94; 1934, 5.65; 1935. 6.16.

Statistical Distributions

Tables 17 to 27 give statistical details regarding accidents and workmen. including, where the data is available. Schedule 2 and Crown cases as well as Schedule 1. Considerations of space preclude more extensive tabulations, but the original material is retained and still fuller information is always available concerning the accidents in any of the different classes of industry.

Month of Occurrence

Table 17 gives the month of occurrence of all accidents. The month in which the greatest number occurred during 1935 was October, with 4,967, and the month with the lowest number was April, with 3,965.

Accidents According to Locality

The distribution of accidents according to the county or district in which they occurred is contained in Table 18. York had the highest number, with 11,998; and next in order was Temiskaming. with 5.064; Essex, with 3,121; Wentworth. with 2.900; and Thunder Bay, with 2.701. The greatest number of deaths (37) were in Temiskaming; there were 32 in York; 15 in Sudbury; 11 in Thunder Bay; and 10 in each of Kenora and Wentworth.

Time Loss, Age, and Wage

In table 19 are given the average age and wage of workmen, receiving compensation. and the total and average time loss for each class of industry, and for each category of disability. The average age for 1935 was 36.05 years. The average wage for 1935 was $17.60, as compared with $16.86 for 1934, and $15.86 for 1933. The total time loss in temporary disability cases was 687,450 days, or an average of 29.86 days, as compared with an average of 25.95 days in 1934 and 22.86 days in 1933.

Compensation and Medical Aid Costs, Schedule 1

Table 20 contains the total and average cost of compensation and medical aid by classes in Schedule 1 for each kind of disability.

The total cost of all accidents was $4.386.477.31, of which $3,353,547.98 was for compensation (including payments for rehabilitation but not for silicosis cases) and $1,032,929.33 was for medical aid (except in silicosis cases).

Of the $3,353,547.98 compensation cost. $1.369.569.13 was for temporary disability cases, $1.374,329.64 was for permanent disability cases, and $609.649.21 was for death cases.

The average cost of temporary disability cases was $113.40, of which $75.23 was for compensation and $38.17 was for medical aid, the average in 1934 being $118.10.

The average cost of permanent disability cases was $1.830.47. of which $290.42 was for temporary disability, $1.345.69 was for permanent disability, and $194.36 was for medical aid.

The average cost of death cases. where there were dependants, was $5,515.21, and the average cost of all death cases was $4.034.15. of which $68.76 was for temporary disability, $123.92 for burial expenses. $3.740.53 for death benefits. and $100.94 for medical aid.

The average cost of all cases in which compensation was paid was $220.17, of which $174.66 was for compensation. and $45.51 was for medical aid. as compared with $214.80 for 1934. and $217.80 for 1933.

The average cost of medical aid in medical aid only cases was $5.93. as compared with $5.94 in 1934. and $5.82 in 1933.

Allegiance of Injured

Table 21 shows the allegiance of injured workers who received compensation, as taken from their own reports. There were 21.330. or over 88 per cent., of British allegiance. and 2.894 of foreign allegiance. Among the aliens the most numerous were: Finns. Poles. Russians, Czechs and Italians.

Sex and Marital Condition of Injured

Table 22 gives the sex and marital condition of those receiving compensation. There were 24,018 males and 206 females. Of the males, 14.494 were married. and 33 of the females. There were 412 widowers and 34 widows.

Duration of Disability

Table 23 shows the week of termination of temporary disability cases. In nearly 39 per cent. of the cases the disability terminated in from one to two weeks. In 106 cases the disability lasted for more than a year.

Nature of Injuries

The first part of Table 24 shows the number of various kinds of temporary disability injuries in the different classes of industry; the second part gives an analysis of the permanent disability cases, showing the number of injuries to the several parts of the body and the percentages of impairment of earning capacity, and the third part of the table shows the number and nature of the industrial disease cases.

For 1935 there were 7.356 cuts. lacerations, and punctures; 5,947 bruises, contusions and abrasions; 2,995 fractures; 2.827 sprains. strains, twistings, and wrenchings; 1,315 crushes; 773 burns and scalds; 742 injuries to eyes; 182 dislocations; and 414 herniae.

Among the 992 permanent disability cases were 29 permanent total disability cases, and 329 exceeded ten per cent. of working capacity.

There were 83 industrial disease cases. of which 25 involved medical aid only; 31 were temporary disability cases; 11 were permanent disability cases, and 16 were death cases. Included in these totals are 30 cases of lead poisoning, 29 cases of silicosis and pneumoconiosis, and 15 cases of compressed air illness or caisson disease.

Causes of Accidents

Table 25 gives the prime causes of accidents in 1935. Machinery was responsible for 8.387 out of a total of 52.128. or 16.1 per cent. of all cases, as compared with 15.39 per cent. in 1934. and 19.88 per cent. in 1933.

Blood-Poisoning Cases

The number of compensation cases in which the seriousness of the accident was due to concurrent or subsequent infection rather than to the nature of the wound is shown in Table 26. There were 1,488 such cases. or 6.1 per cent. of cases compensated, including 19 cases of permanent disability and 2 deaths.

Death Cases

The nature of awards. the number. relationship, and residence of dependants, are shown in Table 27.

TABLE 15

FINAL FINANCIAL STATEMENT FOR 1935, SCHEDULE 1

BY CLASSES

Class	Income and Credits	Expenditure and Charges	Balance for 1935	Balance Forward Prior Years	Balance at Dec. 31, 1935	Class
	$ c.	$ c.	$ c.	$ c.	$ c.	
1	505,110 22	504,315 01	795 21	—241,874 33	—241,079 12	1
2	223,127 18	188.094 75	35,032 43	129,158 61	164,191 04	2
3	62.793 15	53,647 01	9,146 14	—20,648 83	—11,502 69	3
4	118,063 66	137,382 92	—19,319 26	—28,552 53	—47,871 79	4
5	984.266 37	**770,454 94	213,811 43	736,656 19	950,467 62	5
6	121,754 31	118,687 65	3,066 66	117,647 51	120,714 17	6
7	75.061 22	95.920 14	—20,858 92	123,445 41	102,586 49	7
8	148,620 73	117,620 80	30,999 93	36,465 71	67,465 64	8
9	133,019 04	108,115 52	24,903 52	189,795 71	214,699 23	9
10	289,773 93	264,051 33	25,722 60	116,262 53	141,985 13	10
11	231,479 16	241.148 83	—9,669 67	6,315 97	—3,353 70	11
12	193,591 50	170.298 23	23,293 27	69,879 66	93,172 93	12
13	64,861 30	51,478 73	13,382 57	7,887 68	21,270 25	13
14	63,356 13	67,820 24	—4,464 11	—15,979 16	—20,443 27	14
15	309,763 74	332,775 28	—23,011 54	—70,054 59	—93,066 13	15
16	104,669 25	106,524 36	—1,855 11	70,407 54	68,552 43	16
17	84,871 90	107,425 48	—22,553 58	60,706 92	38,153 34	17
18	102,610 33	77,299 68	25,310 65	16,086 01	41,396 66	18
19	71,961 52	74,595 94	—2.634 42	—1,359 39	—3,993 81	19
20	291,102 60	256,921 09	34,181 51	44,133 83	78,315 34	20
21	311,384 58	282,821 08	28,563 50	95,396 87	123,960 37	21
22	66,194 83	52,368 86	13,825 97	56,378 73	70,204 70	22
23	129,001 04	80,002 41	48,998 63	255,338 83	304,337 46	23
24	616,661 08	574,368 92	42,292 16	—132,334 85	—90,042 69	24
	†5,303,098 77	*4,834,139 20	468,959 57	1,621,160 03	2,090,119 60	

†Includes $7,541.18 reimbursement from D.P. & N.H.;
Disaster Reserve—Class 10 $3,332.85
Class 12 9,752.06
Class 24 8,367 24

*Includes $4,404.40 for Rehabilitation.

**Includes $14,664.65 for Mine Rescue Work.

TABLE 15—Continued

BY GROUPS

	Assessments and Compensation		Other Credits and Charges			
Group and Class	Assessments	Compensation and Medical Aid	Sections 8, 105, 112 (3), Etc.	Administration Expenses and Safety Assns.	Balance Forward Prior Years	Balance at December 31, 1935
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Group 010	278,059 61	244,278 03				
" 011	88,023 08	45,391 87				
" 012	135,317 34	168,350 95				
Class 1	501,400 03	458,020 85	3,710 19	46,294 16	—241,874 33	—241,079 12
Group 020	117,712 91	90,055 04				
" 021	23,372 61	15,751 60				
" 022	81,865 56	57,742 28				
Class 2	222,951 08	163,548 92	176 10	24,545 83	129,158 61	164,191 04
Group 030	62,788 65	48,304 01				
Class 3	62,788 65	48,304 01	4 50	5,343 00	—20,648 83	—11,502 69
Group 040	75,251 68	89,481 78				
" 041	16,024 02	9,375 79				
" 042	8,454 24	5,429 55				
" 043	5,319 90	7,826 44				
" 044	12,502 66	10,686 80				
Class 4	117,552 50	122,800 36	511 16	14,582 56	—28,552 53	—47,871 79
Group 050	12,908 18	6,435 05				
" 051	525,827 48	387,700 34				
" 052	344,690 10	188,612 18				
" 053	36,808 50	65,674 05				
" 055	27,779 04	9,014 25				
" 056	33,494 06	30,134 26				
" 057	1,966 42	—54 67				
Class 5	983,473 78	687,515 46	792 59	82,939 48	736,656 19	950,467 62
Group 060	10,735 55	6,794 79				
" 061	29,444 72	21,469 11				
" 062	10,706 89	3,022 56				
" 063	19,259 85	8,375 21				
" 064	19,001 74	14,711 45				
" 065	19,763 54	37,770 82				
" 066	12,756 27	14,532 99				
Class 6	121,668 56	106,676 93	85 75	12,010 72	117,647 51	120,714 17
Group 070	75,061 22	87,193 72				
Class 7	75,061 22	87,193 72	....	8,726 42	123,445 41	102,586 49
Group 080	65,331 46	50,785 71				
" 082	69,313 70	37,323 92				
" 083	13,795 27	15,731 82				
Class 8	148,440 43	103,841 45	180 30	13,779 35	36,465 71	67,465 64

TABLE 15—Continued
BY GROUPS

Assessments and Compensation			Other Credits and Charges			
Group and Class	Assessments	Compensation and Medical Aid	Sections 8, 105, 112 (3), Etc.	Administration Expenses and Safety Assns.	Balance Forward Prior Years	Balance at December 31, 1935
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Group 090	12,456 55	4,095 91				
" 091	13,705 52	16,077 27				
" 092	2,179 40	—8,306 46				
" 093	3,960 97	10,177 52				
" 094	92,957 11	66.203 69				
" 095	7,538 47	6,907 09				
Class 9	132,798 02	95,155 02	221 02	12,960 50	189,795 71	214,699 23
Group 100	60,239 91	38,774 44				
" 101	90,980 34	77,795 43				
" 102	36,587 68	32,003 96				
" 103	31,065 34	22.957 28				
" 104	17,449 82	10,654 89				
" 105	13,932 23	5,959 61				
" 106	29,123 88	38,794 25				
" 107	6,357 54	8,499 13				
Class 10	285,736 74	235,438 99	4,037 19	28,612 34	116,262 53	141,985 13
Group 110	46,058 69	56,710 71				
" 111	172.653 12	145,235 37				
" 112	5,251 68	4,592 95				
" 113	6.750 80	11,379 99				
Class 11	230,714 29	217,919 02	764 87	23,229 81	6,315 97	—3,353 70
Group 120	51.229 00	25,980 11				
" 121	63,367 40	52,536 76				
" 122	37,627 73	43,484 83				
" 123	11,181 19	16.325 66				
" 124	18,049 47	13,795 45				
Class 12	181,454 79	152,122 81	12,136 71	18,175 42	69,879 66	93,172 93
Group 130	39,332 88	31,678 09				
" 131	25,177 39	15,716 01				
Class 13	64,510 27	47,394 10	351 03	4,084 63	7,887 68	21,270 25
Group 140	63,309 90	61,063 76				
Class 14	63,309 90	61,063 76	46 23	6,756 48	—15,979 16	—20,443 27
Group 150	112.572 88	74,560 25				
" 151	57,118 42	58,592 29				
" 152	19,451 82	25,922 52				
" 153	40,807 30	45,583 88				
" 154	22.134 00	32,528 39				
" 155	48.272 37	60,155 05				
" 156	7,304 04	4,132 74				
Class 15	307,660 83	301,475 12	2.102 91	31.300 16	—70,054 59	—93,066 13
Group 160	38,692 00	33,591 27				
" 161	19,054 08	7,993 56				
" 162	7,808 59	6,116 88				
" 163	20,292 94	32,794 39				
" 164	18.008 86	15,749 29				
Class 16	103,856 47	96.248 39	812 78	10,275 97	70.407 54	68,552 43

TABLE 15—Continued

BY GROUPS

Assessments and Compensation			Other Credits and Charges			
Group and Class	Assessments	Compensation and Medical Aid	Sections 8, 105, 112 (3), Etc.	Administration Expenses and Safety Assns.	Balance Forward Prior Years	Balance at December 31, 1935
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Group 170	46,232 15	59,713 29				
" 171	27,423 55	22,899 37				
" 172	11,091 03	16,657 50				
Class 17	84,746 73	99,270 16	125 17	8,155 32	60,706 92	38,153 34
Group 180	65.907 98	48,412 50				
" 181	29,268 30	19,140 15				
Class 18	95,176 28	67,552 65	7,434 05	9,747 03	16,086 01	41,396 66
Group 190	26,291 13	23.605 35				
" 191	27,513 05	32,590 46				
" 192	9,925 63	6,315 23				
" 193	8,109 13	3,839 32				
Class 19	71,838 94	66,350 36	122 58	8,245 58	—1,359 39	—3,993 81
Group 200	197,147 83	143,991 65				
" 201	92,104 08	95,247 47				
Class 20	289,251 91	239,239 12	1,850 69	17,681 97	44,133 83	78,315 34
Group 210	246,413 30	223,498 58				
" 211	63,702 77	41,885 27				
Class 21	310,116 07	265,383 85	1,268 51	17,437 23	95.396 87	123,960 37
Group 220	66,142 16	43,319 54				
Class 22	66,142 16	43,319 54	52 67	9,049 32	56,378 73	70,204 70
Group 230	23,581 73	15.977 57				
" 231	40,455 53	40.134 87				
" 232	64,542 14	17.920 86				
Class 23	128,579 40	74,033 30	421 64	5,969 11	255.338 83	304,337 46
Group 240	396.724 90	352.947 41				
" 241	12,423 78	18 002 71				
" 243	16,493 95	13,505 98				
" 244	63.316 22	37 997 74				
" 245	55,598 71	68 989 49				
" 246	27,223 38	38,264 69				
" 247	23,970 48	13,041 29				
" 249	9,686 70	3,860 11				
Class 24	605,438 12	546.609 42	11,222 96	27,759 50	−132,334 85	−90,042 69
Schedule 1	5,254,667 17	*4,386,477 31	†48,431 60	**447,661 89	1,621,160 03	2,090,119 60

†Includes $7,541.18 reimbursement from D.P. & N.H.; Disaster Reserve—Class 10, $3,332.85; Class 12, $9,752.06; Class 24, $8,367.24.
*Includes $4,404.40 for Rehabilitation.
**Includes $14,664.65 for Mine Rescue Work.

TABLE 16

NUMBER OF ACCIDENTS IN 1935 INVOLVING PAYMENT

Class	Medical Aid Only	Temporary Disability	Permanent Disability	Death	TOTALS
1	562	2,670	97	22	3,351
2	1,090	1,124	33	3	2,250
3	498	295	26	...	819
4	647	458	40	4	1,149
5	2,366	1,971	103	46	4.486
6	385	324	27	4	740
7	345	159	9	5	518
8	1,029	377	16	1	1,423
9	1,467	376	23	5	1,871
10	3,426	1,148	96	7	4,677
11	4,173	862	71	5	5,111
12	923	516	19	6	1,464
13	234	193	7	2	436
14	519	220	11	1	751
15	2,054	1,433	48	3	3,538
16	762	324	24	3	1,113
17	809	495	25	3	1,332
18	1,081	507	11	...	1,599
19	726	345	21	1	1,093
20	913	1,170	28	12	2,123
21	881	1,408	29	11	2,329
22	176	87	3	4	270
23	314	364	10	4	692
24	1,461	1,379	67	11	2,918
Schedule 2	6	1,429	58	22	1,515
Crown Cases	1,057	3,390	90	23	4,560
TOTALS	27,904	23,024	992	208	52,128

TABLE 17

MONTH OF OCCURRENCE OF ACCIDENTS, 1935

Month of Occurrence	Medical Aid Only	Temporary Disability	Permanent Disability	Death	TOTALS
January	1.990	2,042	132	12	4.176
February	1.976	1,898	99	13	3.986
March	2,292	1,892	111	19	4,314
April	2,215	1,650	89	11	3,965
May	2,214	1,657	87	21	3,979
June	2,366	1,702	65	20	4,153
July	2,742	2,097	69	17	4,925
August	2,468	2,000	62	17	4,547
September	2,453	1,976	69	18	4,516
October	2,670	2,200	79	18	4,967
November	2,468	2.044	78	23	4,613
December	2,050	1,866	52	19	3,987
TOTALS	27,904	23,024	992	208	52,128

TABLE 18

LOCALITY OF ACCIDENTS, 1935

County or District	Medical Aid Only	Temporary Disability	Permanent Disability	Death	TOTALS
Algoma	366	773	28	9	1,176
Brant	559	237	18	4	818
Bruce	68	125	5	1	199
Carleton	707	874	36	6	1,623
Dufferin	21	19	2	...	42
Dundas	16	38	...	...	54
Durham	124	48	2	1	175
Elgin	113	132	6	2	253
Essex	2,430	640	48	3	3,121
Frontenac	232	287	11	2	532
Glengarry	39	30	...	...	69
Grenville	47	71	3	...	121
Grey	281	161	8	2	452
Haldimand	60	55	2	2	119
Haliburton	80	95	11	...	186
Halton	201	168	7	1	377
Hastings	295	513	23	7	838
Huron	68	173	3	2	246
Kenora	369	942	27	10	1,348
Kent	350	181	18	1	550
Lambton	401	190	7	3	601
Lanark	125	154	8	1	288
Leeds	170	127	4	2	303
Lennox-Addington	39	79	6	...	124
Lincoln	616	289	17	2	924
Manitoulin	6	25	5	...	36
Middlesex	538	593	23	3	1,157
Muskoka	141	232	9	1	383
Nipissing	222	617	23	4	866
Norfolk	138	99	2	1	240
Northumberland	56	100	1	1	158
Ontario	1,206	256	18	2	1,482
Oxford	410	190	9	...	609
Parry Sound	101	436	8	2	547
Patricia	76	96	2	1	175
Peel	72	76	2	1	151
Perth	222	170	8	1	401
Peterborough	350	243	7	6	606
Prescott	70	42	2	...	114
Prince Edward	16	32	3	1	52
Rainy River	159	395	7	2	563
Renfrew	273	485	21	2	781
Russell	7	16	...	...	23
Simcoe	388	253	13	...	654
Stormont	148	109	11	2	270
Sudbury	330	963	43	15	1,351
Temiskaming	2,679	2,253	95	37	5,064
Thunder Bay	841	1,800	49	11	2,701
Victoria	127	188	7	2	324
Waterloo	1,295	537	35	3	1,870
Welland	734	533	28	3	1,298
Wellington	450	282	12	2	746
Wentworth	1,907	934	49	10	2,900
York	7,160	4,610	196	32	11,998
Not in Ontario	5	58	4	2	69
TOTALS	27,904	23,024	992	208	52,128

TABLE 19

TIME LOSS, AVERAGE AGE, AND AVERAGE WAGE, 1935

Class	TIME LOSS*						AGE	WAGE
	Temporary Disability		Permanent Disability		Death Cases		All Cases	All Cases
	Total Days	Average Days	Total Days	Average Days	Total Days	Average Days	Average Age (Years)	Average Weekly Wage
								$ c.
1	87,415	32.73	14,414	148.60	0	0	33.84	13 98
2	45,200	40.21	3,230	97.88	25	8.33	34.85	18 00
3	5,857	19.85	1,822	70.08	....	......	37.25	14 34
4	11,807	25.78	4,080	102.00	13	3.25	36.34	14 00
5	59,327	30.10	14,261	138.46	6,885	149.74	33.64	28 47
6	13,641	42.10	4,094	151.63	1,094	273.50	36.69	15 59
7	5,386	33.87	576	64.00	0	0	40.19	20 42
8	9,109	24.16	2,246	140.38	0	0	37.79	17 09
9	10,216	27.17	1,883	81.87	14	2.80	39.68	18 52
10	27,230	23.71	5,737	59.76	889	127.00	33.93	16 54
11	20,535	23.82	3,624	51.04	537	107.40	35.52	21 05
12	14,267	27.65	2,615	137.63	301	50.17	36.77	18 94
13	6,862	35.55	804	114.87	22	11.00	39.71	17 48
14	5,608	25.49	1,615	146.82	0	0	34.96	17 10
15	37,870	26.43	10,989	228.96	3	1.00	34.80	15 72
16	7,563	23.34	2,126	88.58	362	120.67	33.81	16 73
17	11,081	22.39	2,592	103.68	31	10.33	32.93	15 03
18	9,050	17.85	2,307	209.73	......	......	30.76	15 68
19	8,389	24.32	1,333	63.48	65	65.00	32.10	18 85
20	35,415	30.27	5,267	188.11	113	8.59	35.23	16 13
21	44,532	31.63	3,970	136.90	205	18.64	37.16	17 59
22	2,398	27.56	1,000	333.33	0	0	40.98	19 67
23	10.874	29.87	661	6 61	12	3.00	37.15	16 92
24	47,743	34.62	21,088	314.63	9	.82	37.44	18 55
Schedule 2	48,158	33.70	14,021	241.74	260	11.82	42.35	19 62
Crown....	101,917	30.06	17,223	191.37	35	1.52	37.90	14 83
ALL......	687,450	29.86	143,578	144.74	10,875	52.28	36.05	17 60

*This does not include loss of man power by permanent impairment or death.

TABLE 20

TOTAL AND AVERAGE COMPENSATION AND MEDICAL AID COSTS, 1935, SCHEDULE 1, BY CLASSES

Compensation Costs

ass	Temporary Disability Cases		Permanent Disability Cases				Death Cases						ALL CASES	
	For Temporary Disability		For Temporary Disability		For Permanent Disability		For Temporary Disability		For Death Benefits		For Funeral Expenses			
	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	176,802 06	66 22	22,824 05	235 30	111,282 85	1,147 25	0	0	12,057 00	548 05	2,682 90	121 95	325,648 86	116 76
2	64,190 94	57 11	6,516 27	197 46	32,413 75	982 23	68 72	22 91	16,304 00	5,434 67	360 00	120 00	119,853 68	103 32
3	15,906 67	53 92	2,958 58	113 79	17,751 75	682 76	......	......	....	....	....	......	36,617 00	114 07
4	37,997 09	82 96	8,395 16	209 88	29,040 00	726 00	26 04	6 51	21,820 00	5,455 00	500 00	125 00	97,778 29	194 78
5	227,672 90	115 51	37,135 55	375 11	161,352 01	1,629 82	3,002 31	65 29	123,314 00	2,680 74	4,750 00	125 00	557,226 77	264 34
6	16,923 63	52 23	8,051 42	298 21	43,574 20	1,613 86	1,740 75	435 19	15,293 00	3,824 25	500 00	125 00	86,083 00	242 49
7	17,622 80	110 84	1,619 73	179 97	17,752 50	1,972 50	0	0	34,678 00	6,935 60	625 00	125 00	72,298 03	417 91
8	48,470 82	128 57	5,285 81	330 36	23,252 75	1,453 29	0	0	2,543 00	2,543 00	125 00	125 00	79,677 39	202 23
9	19,324 64	51 40	5,713 77	248 42	25,240 00	1,097 39	36 66	7 33	17,808 00	3,561 60	625 00	125 00	68,748 07	170 17
10	64,101 19	55 84	12,997 22	135 39	60,940 00	634 79	1,640 25	234 32	27,837 00	3,976 71	875 00	125 00	168,390 66	134 60
11	56,901 60	66 01	8,907 31	125 46	63,853 05	899 34	776 84	155 37	21,323 00	4,264 60	617 00	123 40	152,378 80	162 45
12	42,331 54	82 04	6,512 96	342 79	38,615 50	2,032 39	670 81	111 80	28,094 00	4,682 33	750 00	125 00	116,974 81	216 22
13	15,669 08	81 19	1,740 41	248 63	10,839 50	1,548 50	48 33	24 17	8,941 00	4,470 50	250 00	125 00	37,488 32	185 59
14	16,102 78	73 19	3,861 27	351 02	19,406 00	1,764 18	0	0	5,549 00	5,549 00	125 00	125 00	45,044 05	194 16
15	89,273 22	62 30	28,340 44	590 43	94,563 00	1,970 06	0	0	9,304 00	3,101 33	375 00	125 00	221,855 66	149 50
16	20,712 50	63 93	4,190 78	174 62	35,424 50	1,476 02	1,482 86	494 29	12,683 00	4,227 67	375 00	125 00	74,868 64	213 30
17	23,438 20	47 35	4,910 68	196 43	28,673 25	1,146 93	64 59	21 53	19,488 00	6,496 00	375 00	125 00	76,949 72	147 13
18	26,463 82	52 20	4,641 83	421 98	14,590 50	1,326 41	......	......	....	....	......	......	45,696 15	88 22
19	21,215 82	61 50	3,091 62	147 22	14,674 14	698 77	334 88	334 88	8,313 00	8,313 00	125 00	125 00	47,754 46	130 12
20	46,620 31	39 85	9,535 69	340 56	59,334 17	2,119 08	193 01	16 08	57,212 00	4,767 75	1,496 98	124 75	174,392 16	144 13
21	113,922 65	80 91	7,592 92	261 82	29,827 50	1,028 53	553 09	50 28	40,367 00	3,669 73	1,329 20	120 84	193,592 36	133 70
22	11,812 10	135 77	2,161 40	720 47	3,048 00	1,016 00	0	0	20,852 00	5,213 00	500 00	125 00	38,373 50	408 22
23	36,136 81	99 28	2,288 83	228 88	11,591 00	1,159 10	1 79	45	7,372 00	1,843 00	500 00	125 00	57,890 43	153 15
24	159,955 95	115 99	44,675 47	666 80	183,340 55	2,736 43	17 20	1 47	68,631 00	6,239 18	1,347 00	122 46	457,967 17	314 32
LL	1,369,569 13	75 23	243,919 17	290 42	1,130,380 47	1,345 69	10,658 13	68 76	579,783 00	3,740 53	19,208 08	123 92	3,353,547 98	174 66

TABLE 20—Continued

Medical Aid Costs

Class	When Medical Aid Only		In Temporary Disability Cases		In Permanent Disability Cases		In Death Cases		FOR ALL CASES	
	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1	2,774 50	4 94	112,157 26	42 01	17,226 73	177 60	213 50	9 70	132,371 99	39 50
2	6,353 65	5 83	33,082 45	29 43	3,783 14	114 64	476 00	158 67	43,695 24	19 42
3	2,788 00	5 60	6,524 16	22 12	2,374 85	91 34	......	.. ..	11,687 01	14 27
4	3,547 95	5 48	15,442 66	33 72	5,680 46	142 01	351 00	87 75	25,022 07	21 78
5	14,975 45	6 33	88,318 57	44 81	22,651 07	228 80	4,343 60	114 31	130,288 69	29 12
6	2,561 65	6 65	10,104 84	31 19	7,698 44	285 13	229 00	57 25	20,593 93	27 83
7	2,353 65	6 82	11,192 15	70 39	1,337 89	148 65	12 00	2 40	14,895 69	28 76
8	4,870 50	4 73	13,513 42	35 84	5,780 14	361 26	0	0	24,164 06	16 98
9	7,397 40	5 04	15,049 17	40 02	3,752 88	163 17	207 50	41 50	26,406 95	14 11
10	18.410 57	5 37	39,328 74	34 26	7,972 42	83 05	1,336 60	190 94	67,048 33	14 34
11	27,425 50	6 57	32,380 29	37 56	5,193 78	73 15	540 65	108 13	65,540 22	12 82
12	5,913 54	6 41	19,357 14	37 51	6,221 19	327 43	3,656 13	609 35	35,148 00	24 01
13	1,426 75	6 10	7,211 43	37 36	1,089 15	155 59	178 45	89 23	9,905 78	22 72
14	3,639 40	7 01	8,271 01	37 60	4,043 30	367 57	66 00	66 00	16,019 71	21 33
15	13,085 40	6 37	50,341 76	35 13	16,071 30	334 82	121 00	40 33	79,619 46	22 50
16	4,785 55	6 28	12,586 56	38 85	3,119 53	129 98	888 11	296 04	21,379 75	19 21
17	4,295 64	5 31	13,679 73	27 64	4.201 07	168 04	144 00	48 00	22.320 44	16 76
18	6,104 45	5 65	12,421 84	24 50	3,330 21	302 75	....	......	21,856 50	13 67
19	4,845 22	6 67	11,580 97	33 57	1,963 71	93 51	206 00	206 00	18,595 90	17 01
20	5,538 58	6 07	51,478 74	44 00	6,608 29	236 01	1,221 35	101 78	64,846 96	30 54
21	4,934 24	5 60	61,272 12	43 52	4,630 13	159 66	955 00	86 82	71,791 49	30 83
22	1,221 90	6 94	2,750 84	31 62	943 80	314 60	29 50	7 38	4,946 04	18 32
23	1,876 05	5 97	13,014 17	35 75	1,200 90	120 09	51 75	12 94	16,142 87	23 33
24	8,002 70	5 48	53,832 91	39 04	26,388 39	393 86	418 25	38 02	88,642 25	30 38
ALL....	159,128 24	5 93	694,892 93	38 17	163.262 77	194 36	15.645 39	100 94	1,032,929 33	22 43

TABLE 21

ALLEGIANCE OF INJURED WORKERS, 1935

Allegiance to	Temporary Disability	Permanent Disability	Death	TOTALS
Austria	161	4	1	166
Belgium	9	...	2	11
Bulgaria	9	...	...	9
China	1	...	...	1
Czecho-Slovakia	296	13	2	311
Denmark	19	...	2	21
Esthonia	2	...	...	2
Finland	543	17	5	565
France	42	1	...	43
Germany	60	1	...	61
Great Britain	20,262	891	177	21,330
Greece	10	...	...	10
Holland	3	...	...	3
Italy	277	10	6	293
Japan	2	...	...	2
Jugo-Slavia	121	1	1	123
Lithuania	5	2	...	7
Mexico	1	...	...	1
Norway	56	1	...	57
Persia	8	...	...	8
Poland	521	20	8	549
Roumania	47	4	1	52
Russia	345	15	2	362
Spain	2	...	1	3
Sweden	157	4	...	161
Switzerland	4	...	...	4
Turkey	12	...	...	12
United States	49	8	...	57
TOTALS	23,024	992	208	24,224

TABLE 22

SEX AND MARITAL CONDITION OF INJURED WORKERS, 1935

Sex and Marital Condition	Temporary Disability	Permanent Disability	Death	TOTALS
Males—				
Married	13.688	654	152	14,494
Single	8,704	302	44	9,050
Widowed	384	24	4	412
Not specified	51	3	8	62
Totals	22,827	983	208	24,018
Females—				
Married	31	2	...	33
Single	128	6	...	134
Widowed	33	1	...	34
Not specified	5	...	...	5
Totals	197	9	...	206
GRAND TOTALS	23,024	992	208	24,224

TABLE 23

WEEK OF TERMINATION OF TEMPORARY DISABILITIES, 1935

In	8.870	cases	the	disability	terminated	in	1	to	2	weeks	after	the	accident
"	4.170	"	"	"	"	"	2	"	3	"	"	"	"
"	2,513	"	"	"	"	"	3	"	4	"	"	"	"
"	1,742	"	"	"	"	"	4	"	5	"	"	"	"
"	1,224	"	"	"	"	"	5	"	6	"	"	"	"
"	876	"	"	"	"	"	6	"	7	"	"	"	"
"	659	"	"	"	"	"	7	"	8	"	"	"	"
"	494	"	"	"	"	"	8	"	9	"	"	"	"
"	375	"	"	"	"	"	9	"	10	"	"	"	"
"	263	"	"	"	"	"	10	"	11	"	"	"	"
"	230	"	"	"	"	"	11	"	12	"	"	"	"
"	208	"	"	"	"	"	12	"	13	"	"	"	"
"	193	"	"	"	"	"	13	"	14	"	"	"	"
"	112	"	"	"	"	"	14	"	15	"	"	"	"
"	84	"	"	"	"	"	15	"	16	"	"	"	"
"	89	"	"	"	"	"	16	"	17	"	"	"	"
"	84	"	"	"	"	"	17	"	18	"	"	"	"
"	68	"	"	"	"	"	18	"	19	"	"	"	"
"	56	"	"	"	"	"	19	"	20	"	"	"	"
"	62	"	"	"	"	"	20	"	21	"	"	"	"
"	41	"	"	"	"	"	21	"	22	"	"	"	"
"	30	"	"	"	"	"	22	"	23	"	"	"	"
"	43	"	"	"	"	"	23	"	24	"	"	"	"
"	29	"	"	"	"	"	24	"	25	"	"	"	"
"	28	"	"	"	"	"	25	"	26	"	"	"	"
"	32	"	"	"	"	"	26	"	27	"	"	"	"
"	32	"	"	"	"	"	27	"	28	"	"	"	"
"	29	"	"	"	"	"	28	"	29	"	"	"	"
"	24	"	"	"	"	"	29	"	30	"	"	"	"
"	17	"	"	"	"	"	30	"	31	"	"	"	"
"	25	"	"	"	"	"	31	"	32	"	"	"	"
"	25	"	"	"	"	"	32	"	33	"	"	"	"
"	17	"	"	"	"	"	33	"	34	"	"	"	"
"	22	"	"	"	"	"	34	"	35	"	"	"	"
"	6	"	"	"	"	"	35	"	36	"	"	"	"
"	146	"	"	"	"	"	36	"	52	"	"	"	"
"	106	"	"	"	did not terminate in				52	"	"	"	"
	23,024	TOTAL CASES											

TABLE 24

NATURE OF INJURIES, 1935

Temporary Disability Cases

Class	Bruises, Contusions, and Abrasions	Cuts, Lacerations, and Punctures	Fractures	Crushes	Sprains, Strains, Twistings, and Wrenchings	Scalds and Burns	Eye Injuries	Herniae	Internal Injuries	Concussions (brain, spine, etc.)	Dislocations	All Other Injuries	Industrial Diseases (Schedule 3)	TOTALS
1......	736	957	352	149	297	27	53	31	3	10	15	40	....	2,670
2......	300	364	125	57	173	25	21	24	1	1	7	26	....	1,124
3......	43	178	18	13	22	4	5	3	....	1	5	3	....	295
4......	86	241	37	28	22	14	4	5	....	....	....	1	....	458
5......	614	592	283	76	159	56	111	38	1	8	12	18	3	1,971
6......	75	91	51	29	37	5	15	8	2	2	4	4	1	324
7......	37	35	41	7	12	18	2	6	....	....	....	1	....	159
8......	65	113	49	26	31	61	12	11	....	....	2	7	....	377
9......	86	130	53	24	29	19	21	9	....	1	3	1	....	376
10......	187	477	135	95	86	70	54	18	1	1	9	11	4	1,148
11......	175	303	119	38	95	48	34	19	2	3	2	12	12	862
12......	132	113	79	27	73	39	18	16	....	3	8	8	....	516
13......	63	48	16	13	36	....	5	6	2	1	3	....	....	193
14......	35	115	28	7	16	2	4	10	....	2	1	....	....	220
15......	343	498	176	56	171	95	22	31	....	6	16	18	1	1,433
16......	54	149	34	15	25	17	12	4	2	1	4	7	....	324
17......	103	212	43	34	51	19	11	9	....	1	5	7	....	495
18......	99	263	28	22	53	25	5	8	....	....	2	2	....	507
19......	68	133	36	38	29	13	9	8	....	1	5	4	1	345
20......	335	296	166	86	175	26	24	15	2	7	13	17	8	1,170
21......	383	379	173	103	213	39	61	24	4	4	7	18	....	1,408
22......	24	19	16	1	13	3	5	1	1	4	....	....	....	87
23......	105	98	57	22	57	6	8	3	1	....	5	2	....	364
24......	342	422	211	70	161	70	42	10	6	9	8	22	6	1,379
Sched. 2.	406	330	242	87	215	37	46	29	....	3	9	23	1	1,429
Crown..	1,031	800	427	192	576	35	138	68	1	8	37	78	....	3,390
ALL....	5,947	7,356	2,995	1,315	2,827	773	742	414	29	77	182	330	37	23,024

TABLE 24—Continued

Permanent Disability Cases

Part of Body Affected	Per Cent. Impairment of Total Earning Capacity											
	0.0- 9.9	10.0-19.9	20.0-29.9	30.0-39.9	40.0-49.9	50.0-59.9	60.0-69.9	70.0-79.9	80.0-89.9	90.0-99.9	100.	TOTALS
Foot	41	6	1	4	2	2	....	1	....	....	....	57
Leg	31	15	7	2	7	5	....	....	....	....	5	72
Head	2	1	....	1	....	1	....	1	....	....	4	10
Face	2	....	....	....	....	....	....	....	....	....	....	2
Eye	40	82	1	....	....	....	1	1	....	....	4	129
Ear	1	1	....	....	....	....	....	....	....	....	....	2
Arm	27	13	10	7	4	1	5	4	....	....	....	71
Hand	14	18	10	13	2	3	....	....	....	....	1	61
Thumb and two fingers	....	10	1	....	....	....	....	....	....	....	....	11
Thumb and one finger	7	2	1	....	....	....	....	....	....	....	....	10
Thumb	141	1	....	....	....	....	....	....	....	....	....	142
One finger	284	....	....	....	....	....	....	....	....	....	....	284
Two fingers	52	....	....	....	....	....	....	....	....	....	....	52
Three fingers	8	3	....	....	....	....	....	....	....	....	....	11
Four fingers	3	3	1	....	....	....	....	....	....	....	....	7
Internal Organs	....	....	....	....	....	....	....	....	....	....	1	1
Industrial Diseases	....	....	....	2	2	2	4	....	....	....	1	11
All other	10	9	8	8	....	6	3	2	....	....	13	59
TOTALS	663	164	40	37	17	20	13	9	....	....	29	992

Industrial Diseases

Description of Disease	Medical Aid Only	Temporary Disability	Permanent Disability	Death	TOTALS
Lead poisoning or its sequelae	2	26	. .	2	30
Silicosis, pneumoconiosis, phthisis	2	2	11	14	29
Chrome poisoning or its sequelae	6	1	. .	. .	7
Tar poisoning	1	. .	. .	. .	1
Cyanide poisoning	. .	1	. .	. .	1
Compressed air illness or caisson disease	14	1	. .	. .	15
TOTALS	25	31	11	16	83

TABLE 25

CAUSES OF ACCIDENTS, 1935

Cause	Medical Aid Only	Temp. Dis.	Perm. Dis.	Death	TOTALS
A. Prime Movers:					
1. Motors, engines, fans, pumps, and automatic stokers	21	62	8	...	91
2. Shafting, coupling, collars, set-screws, and keys	98	49	3	1	151
3. Belts, lines, pulleys, chains, and sprockets	147	123	16	...	286
4. Gears, cogs, cams, and friction wheels	22	15	2	...	39
Totals	288	249	29	1	567
B. Working Machines:					
1. Brick-making machines	2	6	1	...	9
2. Glass-making machines	9	4	...	...	13
3. Pottery-making machines	1	3	...	...	4
4. Stone-working machines	3	3	2	...	8
5. Mine drills	125	40	8	...	173
6. Contracting machines	65	116	6	...	187
7. Metal-working machines, n.e.s.	275	78	11	1	365
8. Abrasive wheels	1,781	154	13	...	1,948
9. Drilling and reaming machines	92	47	1	...	140
10. Lathes	411	67	11	...	489
11. Milling machines	55	16	3	...	74
12. Pneumatic tools	34	27	...	...	61
13. Presses—cutting, shaping, forming	357	187	74	1	619
14. Shearing and punching machines	45	32	12	...	89
15. Wire-working machines	14	12	...	...	26
16. Welding and heat-cutting machines	157	15	1	...	173
17. Wood-working machines, n.e.s.	94	91	4	...	189
18. Planers, jointers, and edgers	78	61	15	1	155
19. Saws	276	312	51	1	640
20. Shapers, moulders, and headers	77	42	9	...	128
21. Pulp and paper-making machines, n.e.s.	12	26	1	...	39
22. Barkers	14	4	1	...	19
23. In-running rolls	47	42	7	...	96
24. Paper-products and printing machines, n.e.s	21	20	7	...	48
25. Cutting machines	24	7	1	...	32
26. Presses—printing and embossing	63	60	7	...	130
27. Stayers	29	34	2	...	65
28. Tanning machines	20	35	4	...	59
29. Leather-working machines	21	19	8	...	48
30. Rubber-working machines	14	17	5	...	36
31. Textile machines, n.e.s	90	26	2	...	118
32. Carders	6	8	...	...	14
33. Pickers	3	11	1	...	15
34. Sewers	258	100	1	...	359
35. Finishers and launderers	....	20	2	...	22
36. Knitters	45	25	1	...	71
37. Cutters	8	7	2	...	17
38. Weavers	55	8	2	...	65
39. Spinners	11	56	...	...	67
40. Food-products, laboratory, and tobacco machines, n.e.s	20	51	6	...	77
41. Baking machines	25	21	1	...	47
42. Bottling machines	44	15	2	...	61
Totals	4,781	1,925	285	4	6,995

TABLE 25—Continued

Cause	Medical Aid Only	Temp. Dis.	Perm. Dis.	Death	TOTALS
C. Hoisting Apparatus:					
1. Elevators	45	55	2	4	106
2. Cranes	1	86	9	1	97
3. Conveyors	66	84	8	4	162
4. Mine cages	9	16	2	1	28
5. Other hoisting apparatus	192	219	18	3	432
Totals	313	460	39	13	825
D. Dangerous Substances:					
1. Steam escapes	48	79	3	1	131
2. Explosives	14	62	12	6	94
3. Electric currents	63	39	4	7	113
4. Conflagrations	....	....	....	...	....
5. Hot and inflammable substances and flames	653	542	10	7	1,212
6. Corrosive substances	195	93	2	...	290
7. Poisonous and deleterious substances	77	111	11	16	215
Totals	1,050	926	42	37	2,055
E. Stepping On or Striking Against Objects:					
1. Stepping on objects	364	228	1	1	594
2. Striking against objects	3,993	1,124	28	2	5,147
Totals	4,357	1,352	29	3	5,741
F. Falling Objects:					
1. From collapse of structure	7	5	...	...	12
2. From elevations	237	260	5	17	519
3. In mines and quarries	312	717	30	17	1,076
4. Other	....	372	...	...	372
Totals	556	1,354	35	34	1,979
G. Handling Objects:					
1. Heavy objects—loading, carrying, rolling, or piling	5,336	5,618	104	6	11,064
2. Sharp objects	707	284	9	...	1,000
3. Hand trucks, carts, and wheel-barrows	269	351	3	1	624
Totals	6,312	6,253	116	7	12,688
H. Tools:	2,661	3,143	114	2	5,920
I. Runaways and Animals:					
1. Runaways	19	33	1	1	54
2. Animals	93	169	3	1	266
Totals	112	202	4	2	320

TABLE 25—Continued

Cause	Medical Aid Only	Temp. Dis.	Perm. Dis.	Death	TOTALS
J. Moving Trains, Vehicles, Etc.:					
1. Train wrecks	4	37	4	7	52
2. Caught in switch or hit fixed objects	1	21	...	1	23
3. Struck by or caught between cars and engines	3	26	5	9	43
4. Other causes, cars and engines	3	28	4	4	39
5. Mine and quarry cars	47	120	4	2	173
6. Automobiles and other power vehicles	367	541	25	17	950
7. Animal-drawn vehicles	22	255	5	1	283
8. All other vehicles, including boats	13	45	...	...	58
Totals	460	1,073	47	41	1,621
K. Falls of Persons:					
1. From elevations	50	289	17	11	367
2. From ladders	132	318	21	5	476
3. Into excavations, pits, and shafts	13	90	6	3	112
4. On level	1,743	3,213	52	6	5,014
5. Into elevator shafts	13	....	...	1	14
6. From vehicles	144	558	10	6	718
7. From collapse of support	42	178	19	5	244
8. On steps or stairways	149	238	2	...	389
9. From tool slipping	18	66	11	...	95
Totals	2,304	4,950	138	37	7,429
L. All Other Causes:					
1. Flying fragments	4,275	714	92	4	5,085
2. Doors, gates, windows, and covers	293	195	10	1	499
3. Inhalation of gases, fumes, etc	37	28	...	4	69
4. Immersion in water and drenchings	....	3	...	11	14
5. Exposure to elements	19	116	4	1	140
6. Violence	18	22	...	...	40
7. Cave-ins	2	51	1	6	60
8. Not elsewhere specified	66	8	7	...	81
Totals	4,710	1,137	114	27	5,988
GRAND TOTALS	27,904	23,024	992	208	52,128

TABLE 26

BLOOD-POISONING CASES, 1935

Ascribed to time of injury	195
Developed 1 day after injury	268
" 2 days " "	221
" 3 " " "	163
" 4 " " "	150
" 5 " " "	118
" 6 " " "	82
" 7 " " "	65
" 8 " " "	30
" 9 " " "	30
" 10 " " "	27
" 11 " " "	20
" 12 " " "	11
" 13 " " "	13
" 14 " " "	17
" 15 " " "	14
" 16 " " "	2
" 17 " " "	6
" 18 " " "	5
" 19 " " "	4
" 20 " " "	3
" 21 " " "	3
" 22 " " "	3
" 23 " " "	3
" 24 " " "	2
" 25 " " "	1
" 27 " " "	2
" 29 " " "	2
" 31 " " "	2
" 36 " " "	1
" 40 " " "	1
" 41 " " "	1
" 46 " " "	1
" 51 " " "	1
Immobilized joints due to infections	10
Amputations due to infections	5
Permanent eye injuries due to infections	4
Deaths due to infections	2
TOTAL CASES OF INFECTION	1,488

TABLE 27

DEATH CASES, 1935

Number of Cases

Pension Awards	129
Lump Sums	29
Burial Expenses and Medical Aid only	35
Burial Expenses only	15
TOTAL	208

Number, Relationship, and Residence of Dependants

Relationship of Dependants	Resident in Ontario	Not Resident in Ontario	TOTALS
Widow	118	12	130
Child	167	9	176
Mother	18	2	20
Father	11	2	13
Other	4	....	4
TOTALS	318	25	343

APPENDIX

SUMMARY OF COMPENSATION AND MEDICAL AID AWARDED

From Commencement of Act to End of 1936

Compensation Awarded

Schedule 1 Industries	$75.597.446 87
Schedule 2 (including Crown Cases)	23,787,229 17
Total Compensation	$99,384,676 04

Medical Aid Paid

Schedule 1 Industries	$16,822,250 21
Schedule 2 (including Crown Cases)—Furnished by Employer	
Total Benefits Awarded by Board	$116.206,926 25

SUMMARY OF ACCIDENTS REPORTED

From Commencement of Act to End of 1936

Schedule 1 Industries	1,011.041	
Schedule 2 (including Crown Cases)	171.700	
Total Number of Accidents Reported		1.182.741

FINANCIAL STATEMENT FOR SCHEDULE 1 INDUSTRIES

From Commencement of Act to End of 1936

Income and Credits

Net Assessments received	$97.316.834 03
Received under Section 8	145.846 07
Received under Section 83(4)	51.806 16
Received under Section 105	146.265 84
Received under Section 112(3)	5.856 57
Received from D. P. & N. H.	208.302 03
Interest received	2.867.491 74
Credited from Disaster Reserve	304.121 41
Credited from Pension Fund	1,027.214 62
Received for accidents to blind workmen	512 92
Received from A. C. R.	34.853 09
Assessments estimated to be due on adjustment of 1936 pay rolls	1.259.375 00
	$103,368.479 48

Expenditure and Charges

Compensation paid other than pensions, compensation deferred, and under Secs. 22 and 36	$40.559,926 79
Pensions awarded	32,988.695 24
Deferred Compensation awarded	792.989 82
Paid under Section 22	996 40
Paid under former Section 36	41 75
Paid under Section 8	10,440 36
Medical Aid paid	16.710.314 82
Administration Expenses paid	4.089.749 73
Paid to Safety Associations	2,111.850 71
Rehabilitation paid	50.691 03
Transferred to Disaster Reserve	353,259 80
Compensation estimated outstanding for 1936 accidents	2,111.540 64
Medical Aid estimated outstanding for 1936 accidents	391,128 68
Estimated to complete prior years' accidents	980.340 59
Paid under Mine Rescue Work	127,453 96
Balance at Credit of Classes (Table 1)	2,089,059 16
	$103.368.479 48

SUMMARY OF PENSION FUND, SCHEDULE 1

From Commencement of Act to End of 1936

Pension awards	$32,854,070 98
Amount transferred from Disaster Reserve	134,624 26
Amount transferred from Silicosis Account	634.926 51
Interest added	13.227,691 45
	$46,851,313 20
Pension payments	24,363,251 14
	$22,488,062 06
Amount transferred to Current Fund	1.027,214 62
Balance December 31, 1936	$21.460,847 44

SUMMARY OF COMPENSATION DEFERRED, SCHEDULE 1

From Commencement of Act to End of 1936

Compensation deferred	$793,404 82
Interest added	101,893 51
	$895.298 33
Paid on Compensation Deferred, Principal and Interest	858,331 16
Balance December 31, 1936	$36,967 17

SUMMARY OF DISASTER RESERVE, SCHEDULE 1

From Commencement of Act to End of 1936

Amount set aside	$353.259 80
Interest added	221.363 05
	$574,622 85
Transferred to classes	304,121 41
Balance December 31, 1936	$270,501 44

SUMMARY OF RESERVE FOR DEPRECIATION OF SECURITIES

From Commencement of Act to End of 1936

Profit on Sale of Investments	$400,369 25
Interest	108,849 56
Balance December 31, 1936	$509.218 81

SUMMARY OF SILICOSIS ACCOUNT, SCHEDULE 1

From Commencement of Act to End of 1936

Assessments collected		$3,105,908 37
Interest added		100,911 88
		$3,206,820 25
Payments made:		
Compensation	$1,203,788 79	
Medical Aid	111,935 39	
Salaries and Expenses	350,590 91	
Handling Claims and Supervision	87,548 53	
Salaries and Expenses of Referee Board	29,333 79	
		1,783,197 41
Balance December 31, 1936		$1.423,622 84

SUMMARY OF INVESTMENTS, SCHEDULE 1

From Commencement of Act to End of 1936

Invested	$50.110,205 50
Less principal returned	22,362.810 00
Book Value of Investments December 31, 1936	$27.747,395 50

SUMMARY OF SCHEDULE 2 FUNDS

From Commencement of Act to End of 1936

Received from employers		$18,628,371 93
Interest received		3,200,882 86
Profit on Sale of Investments		158,943 68
		$21,988,198 47
Payments made	$17,528,020 21	
Deposits returned to employers	841,580 50	
		18,369,600 71
Cash in Bank and Invested, December 31, 1936		$3,618,597 76

SUMMARY OF INVESTMENTS, SCHEDULE 2

From Commencement of Act to End of 1936

Invested	$4,924,509 84
Less principal returned	1,374,324 41
Book Value of Investments, December 31, 1936	$3,550,185 43

SUMMARY OF RECEIPTS AND PAYMENTS

From Commencement of Act to End of 1936

Schedule I

Receipts

Assessments,		
Including additional assessments, added percentage, and interest for under or over estimate	$98,307,892 08	
Less Merit Rating		
(Charges $1.067.195 43 Refunds 2.058.253 48)	—991.058 05	
		$97.316.834 03
Section 8		145.846 07
Section 83(4)		51.806 16
Section 105		146.265 84
Section 112(3)		5.856 57
D. P. & N. H.		208.302 03
C. N. I. B.		512 92
A. C. R.		34.853 09
Silicosis		3.105.903 37
From Province of Ontario under Section 77, grants for administration expenses		655,500 00
From Schedule 2 and Crown employers for share of administration expenses		835.909 85
Interest from investments and bank deposits		16.628.201 19
Principal returned from investments		22.362,810 00
Profit on sale of investments		400.369 25
From Special Statistical Services		74.276 89
Rehabilitation Clinic		39.416 75
Refund of Administration Expenses, result of special investigation		782 35
		$142.013.451 36

Payments

Compensation Payments, other than on Pensions or Deferred Awards or under Secs. 22 or 36	$40.559.926 79
Pensions	24.363.251 14
Deferred Awards, principal and interest	858.331 16
Under Section 22	996 40
Under former Section 36	41 75
Under Section 8	10.440 36
Medical Aid	16.710.314 82
Rehabilitation	50.691 03
Administration Expenses	5.810.485 06
Safety Associations	2.111.850 71
Investments	50.110.205 50
Silicosis	1.060.307 37
Mine Rescue Work	121,632 71
Rehabilitation Clinic	36,866 88
Overpayment of Administration Expenses from Schedule 2 employers (refunded in 1926)	12
Cash in Banks, December 31, 1936	208,109 56
	$142.013.451 36

Schedule 2

Receipts	
From Employers for Deposits under Section 28 and for Claimants' Moneys	$6,461,767 14
From Employers for Deposits under Section 32	12,166,604 79
Interest from Investments and Bank Deposits	3,200,882 86
Principal returned from Investments	1,374,324 41
Profit on Sale of Investments	158,943 68
	$23,362,522 88

Payments	
To Claimants out of Deposits under Section 28 and Claimants' Moneys	$5,520,036 69
Returned to Employers out of Deposits under Section 28	736,398 74
Paid out of Deposits under Section 32:	
To Claimants	12,005,549 96
Returned to Employers	99,412 26
To Schedule 1 for Administration Expenses	5,769 50
Rehabilitation	2,433 56
Investments	4,924,509 84
Cash in Bank, December 31, 1936	68,412 33
	$23,362,522 88

AUDITOR'S CERTIFICATE

26th February, 1937.

THE WORKMEN'S COMPENSATION BOARD OF ONTARIO,
Toronto, Ont.

Dear Sirs:

I have completed a continuous audit of the books of the Board for the year ended 31st December, 1936, and have obtained all the information and explanations I have required.

In my opinion, the attached Statements of Receipts and Payments, Table 6, Schedules 1 and 2, do truly and fairly set forth the cash transactions of the Board for the year ended 31st December, 1936. In addition to the cash receipts for the year, as shown in the accompanying statements, principal and interest on investments became due to a total of $212,115.16, but were not paid, making a total of principal and interest in arrears at 31st December, 1936, of $677,670.36.

Bank balances at the close of the period have been verified by direct communication with the Board's Bankers.

The Investments of the Board as at 31st December, 1936, as shown by the books, have been verified by count. The amortized book value of these Investments is $31,297,580.93.

Respectfully submitted,

A. G. CALDER, F. C. A.,

Chartered Accountant.

London, Ontario, 26th February, 1937.

TABLE 6

STATEMENT OF RECEIPTS AND PAYMENTS DURING 1936

Schedule 1

Receipts

Cash in Banks, 1st Jan., 1936:			
Can. Bank of Commerce	$1,788 21		
Dominion Bank	128,961 50		
Royal Bank of Canada	5,149 84		
			$135,899 55
Net Assessments, Penalties, etc.:			
Gross Assessments	$6,127,734 47		
Under Section 8	15,628 40		
Under Section 105	6,501 94		
Under Section 112(3)	228 33		
Under Section 83(4)	100 00		
From D. P. & N. H.	4,490 66		
From Accident Cost Refunds	19,188 33		
	$6,173,872 13		
Less:			
Assessments and Penalties Refunded	$21,712 72		
Merit Rating Refunds	31 20		
	$21,743 92		
			6,152,128 21
Interest:			
Investments	$1,135,971 72		
Exchange Premium	383 13		
Bank and Short Date Deposits	9,908 53		
			1,146,263 38
Investments:			
Principal Returned	$4,745,012 87		
Profit on Sale of Investments	400,369 25		
			5,145,382 12
From Schedule 2 and Crown Employers for Administration Expenses, account of prior years paid out of Schedule 1 in 1935			84,805 84
Silicosis			215,727 96
Special Statistical Services			11,077 13
Rehabilitation Clinic:			
Refunds from Medical Aid	$9,709 34		
Refunds from Schedule 2 Employers	396 38		
			10,105 72
			$12,901,389 91

Payments

Compensation other than Pensions and Compensation Deferred		$1,644,191 03	
Pensions		2,032,334 26	
Deferred Compensation		20,873 35	
Rehabilitation		4,404 40	
Medical Aid		1,046,053 01	
Silicosis		121,397 20	
Under Section 8		1,341 08	
Mine Rescue Work		12,906 75	
Administration Expenses		388,403 24	
Safety Associations		151,443 75	
Rehabilitation Clinic Expenses		8,216 72	
			$5,431,564 79
Investments			7,261,715 56
Cash in Banks, 31st Dec., 1936:			
Canadian Bank of Commerce	$4,775 44		
Dominion Bank	180,518 54		
Royal Bank of Canada	22,815 58		
			208,109 56
			$12,901,389 91

Schedule 2

Receipts

Cash in Bank, 1st Jan., 1936:		
Imperial Bank		$12,952 40
Employers' Deposits under Section 28		180,738 33
Employers' Deposits under Sections 32		772,806 95
Employers' Deposits of Claimants' Monies		1,590 00
Interest:		
Investments	$175,726 97	
Exchange Premium	270 00	
Bank Deposits	477 34	
		176,474 31
Investments:		
Principal Returned	$846,449 39	
Profit on Sale of Investments	158,943 68	
		1,005,393 07
		$2,149,955 06

Payments

To Claimants out of Deposits under Section 28		$329,840 83
Deposits Returned to Employers under Section 28		728 36
To Claimants out of Claimants' Monies		4,967 60
Paid out of Deposits under Section 32:		
Compensation	$697,048 05	
Medical Aid	59,650 30	
		756,698 35
Deposits Returned to Employers under Section 32		21,213 48
Investments		968,094 11
Cash in Bank, 31st Dec., 1936:		
Imperial Bank		68,412 33
		$2,149,955 06

Ontario Department of Agriculture

REPORT

OF THE

Ontario Veterinary College

1935

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
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—1936—

REPORT OF THE

Ontario Veterinary College

TO THE HONOURABLE DUNCAN MARSHALL,
Minister of Agriculture.

Sir:—

I have the honour to present herewith the following report of the Ontario Veterinary College for the period extending from April 1st, 1935 to March 31st, 1936. This period of time covers the sessional term of the College and is confined largely to student class work and routine duties.

Convocation and Commencement Exercises

At a Special Convocation of the University of Toronto held on May 10th, 1935, the degree of Bachelor of Veterinary Science (B.V.Sc.) was conferred on forty graduates by the Honourable and Reverend H. J. Cody, President of the University.

The Annual Commencement Exercises were held on November 15th, 1935, in the Assembly Hall of the College, the speaker for the occasion being John E. Hauck, B.Sc., of the Ontario Department of Agriculture. In his address Mr. Hauck counselled the students as to the importance of grasping the opportunities for advancement which were presented during their college training. He expressed the view that while emphasis may be placed on the ideal of high proficiency in scholastic work, yet on the other hand the personal side is likewise important and a combination of both should be sought. Success depends not alone on scholastic attainment but also on rendering the highest, finest and cleanest type of professional service. The widening sphere of veterinary science offered many opportunities in public and community service, important features of this work being the prevention and control of animal diseases and the safeguarding of public health through the supervision of food supplies, more particularly meat and meat food products, milk and milk products. Following Mr. Hauck's address the prizes won by students were presented by Dr. J. H. King, M.L.A.

Student Enrollment

The student enrollment has been satisfactorily maintained during the present year. The current registration comprises a total of 201 students, being an increase over the preceding years. As stated in previous reports, we have reached our attendance capacity and to provide for any larger attendance it would require more accommodation, additional laboratory facilities and increased staff. In the meantime it would seem desirable to keep our attendance at a desirable level by a careful selection of applicants. While the majority of our students are residents of Ontario we also have in attendance a number from each of the other provinces, from Great Britain and other parts of the Empire as well as from the United States.

The Teaching and Executive Staff

The personnel of the teaching staff of the different departments are as follows for this session:

C. D. McGilvray, M.D.V., D.V.Sc., Principal:
Contagious Diseases, Sanitary Science.
W. J. R. Fowler, V.S., B.V.Sc.: Anatomy and Surgery.
H. E. Batt, V.S., B.V.Sc.: Zoology, Histology, Meat Inspection.
R. A. McIntosh, M.D.V., B.V.Sc.: Diseases of Cattle, Obstetrics, Therapeutics.
F. W. Schofield, B.V.Sc., D.V.Sc.: Pathology, Bacteriology.
L. Stevenson, B.V.Sc., M.S.: Physiology.
A. A. Kingscote, B.V.Sc., D.V.Sc.: Parasitology, Pathology.
J. S. Glover, B.V.Sc.: Poultry Diseases, Milk Hygiene.
V. R. Brown, B.V.Sc.: Anatomy, Hygiene.
H. R. Potter, B.V.Sc.: Sporadic Diseases, Hygiene.
T. L. Jones, B.V.S., M.Sc.: Bacteriology.
F. J. Cote, B.V.Sc.: Canine and Feline Diseases.
R. Stewart Clark: Jurisprudence.
A. L. Shepherd: Executive Clerk.
Miss A. LeGrand: Secretary, Librarian.
Miss M. Scott: Stenographer.

Courses of Study and Instruction

High standards are being maintained in the general course of instruction, so that the student receives the best possible training during his time at college. It is, however, becoming more noticeable that with the advances being made in the sciences, the studies may require to be expanded, which would require more time and a lengthening of the course. Until the time is considered opportune for extending the length of the course, every effort is being made to keep the attention of the student focused on making the best of the opportunity, and to lay a good foundation for graduate work.

The studies, which are considered to be of essentially a professional nature, are divided up into departments, and a brief description of the nature and scope of the instruction is given under the following headings:

Department of Zoology, Embryology and Histology—The work of this department is presented to first and second year students by means of lectures and laboratory exercises. The course is arranged with a view of imparting to the student a broad knowledge of the subject, especially in its application to veterinary science. Particular attention is given in zoology to the parasitic forms of animal life, thus laying a foundation for the study of parasitology. Embryology is given as a preparatory course to histology, and serves as an aid to the better understanding of genetics and obstetrics. The course in histology consists largely of a study of the various tissues in the animal body and is largely a laboratory one, during which the student is trained to develop microscopic technique to the fullest extent, and to make accurate drawings from the microscopic field.

Owing to the increased student attendance, it has been found advisable to divide the classes into two sections, which arrangement gives opportunity for more individual attention, and serves to make the student more proficient in laboratory technique. The instruction in these departments also serves as a preparatory course for the development of scientific research and laboratory work, in the fields of parasitology, pathology, bacteriology and clinical medicine.

Anatomy—The course in this department has been somewhat changed during this session. The instruction extends over a period of two academic years, and consists of lectures, dissections and clinical demonstrations, and is covered during the first and second years.

The study of anatomy is essentially related to the investigation of the animal body frame work, and is conducted by mechanically dividing it into its component parts and studying their form, structure, attachments and relations. It, therefore, furnishes a foundation for the study of the general form, structure and conformation of animals. Detailed dissection of the anial body is undertaken, so that the student gains an accurate knowledge and a visual conception of the different structures. The classroom lectures are also illustrated by the use of prepared specimens and diagrams. Because of the increasing importance of all species of animals, a comparative study must be made in order that the student becomes conversant with the anatomical differences in the different species of animals.

The study of anatomy also enables the student to develop surgical proficiency. The fact is, to become a good surgeon one must have a sound knowledge of anatomy, and to have practised dissection, so as to become familiar and dexterous in the use of the knife and other instruments, which proves of great use to him in performing surgical operations and in the general practise of clinical surgery in his profession.

Special attention is also given to the occurrence of defects in structure inclining to faulty conformation, and to abnormal conditions likely to cause unsoundness or to impair usefulness. This knowledge proves very valuable in the judging of live stock, and also in the examination of horses for soundness and in the detection of disease.

Physiology—The department of physiology furnishes instruction which embraces the study of the functions of life processes of the domestic animals. The course covers two academic years, commencing during the second year. Attention is given to the subject under the following divisions: the chemical basis of the animal body; the physical basis of life; the blood, its formation, its physical properties, its cellular elements and functions in life; the lymph, its formation, its physical character, its circulation and function; the heart and blood vessels, including principles of circulation, blood pressure, and nervous mechanism; the respirations relating to the mechanism of breathing, the chemistry of respiration, and the respiratory cycle.

During the third year, considerable time is devoted to the mechanism of digestion,—the mechanics of digestion, the absorption of foods, the metabolism of carbohydrates, sugars and fats. Special attention is also given to the metabolic requirements of the body,—the accessory food factors, the endocrine glands and their function, the production and dissipation of heat in the body, and finally the course is completed by a comprehensive study of the male and female relating to growth, regeneration and reproduction.

Parasitology—The instructional work in parasitology has been composed of courses dealing with veterinary protozoology, entomology and helminthology. The economically important species in each group were described. Lectures were supplemented by the examination of museum specimens, lantern slides and laboratory exercises. The use of various instruments and apparatuses was demonstrated. These courses of lectures covered the cause, diagnosis, symptoms, treatment and control of coccidiosis, blackhead, stallion plague, mange, bot, warble, fluke, roundworm and tapeworm infestations and numerous other parasitic diseases which endanger the health of the animals attacked or make their flesh dangerous for human consumption.

Students taking the above courses were required to make a collection of parasites to gain practical experience in conducting post-mortem examinations and at the same time to become familiar with the common parasites of the domestic animals. During the past year thirty-two collections consisting of one thousand seven hundred mounted specimens were handed in and examined.

Routine duties have been conducted in collaboration with other departments. They have comprised the examination of diseased or parasitized animals, carcasses, tissues, skin scrapings and excretions. Numerous specimens have been added to the teaching collection of museum specimens, sets of microscopic preparations, and to our rapidly growing collection of animal parasites.

The time devoted to research projects has been limited owing to increased tutorial and routine duties. Reports have been prepared on the results of further investigations dealing with control of the flesh fly, *Wohlfahrtia vigil,* and other flies; and on tuberculosis in fur bearing animals.

Pathology and Bacteriology—The work of this department consists of tutorial work with the students, diagnostic work in connection with the college clinic, and the laboratory examination of specimens of various kinds, submitted by veterinarians and by farmers for exact diagnoses. Some research projects are also usually under way, but sufficient time is not available during the college session to give research the attention which it requires. The tutorial work consists of a series of lectures and laboratory exercises, conducted with third and fourth year students. An increasing number of pathological specimens are being added to the museum, which greatly facilitates the teaching in pathology. Many post-mortem examinations are also made with animals brought to the College for that purpose. Large numbers of specimens are received from unusual cases, upon which laboratory help is necessary in establishing an exact diagnosis. Personal calls are made almost daily by owners and their veterinarians, for laboratory help relating to losses occuring in live stock.

Research work is being continued into several infectious diseases of animals and reports on the following diseases have been submitted as appendices:

(a) Bothryomycosis of horses.
(b) Encephalomyelitis of horses.
(c) Pulpy kidney disease of sheep.
(d) Malignant vaginitis of cattle.

Infectious and Contagious Diseases of Animals—The course in these diseases deals largely with maladies in the different species of animals which are communicable. Particular attention is given to their nature, prevalence, causes, dissemination, symptoms and methods of diagnosis by means of the various approved tests, and the best known methods for their prevention and suppression. The diseases giving most concern at the present time include tuberculosis, Bang's disease, mastitis, hemorrhagic septicemia, blackleg, swine erysipelas.

Sanitary Service Regulations—This course deals with the official veterinary inspection and certification of live stock, and of meat and meat-food products intended for domestic consumption and export trade. The Animal Contagious Disease Act and regulations relating to quarantine and control of disease received due consideration relating to the duties of owners of animals and veterinary surgeons, together with the various methods adopted for the control and eradication of contagious disease as well as those governing the importation and exportation of live stock in order to ensure the highest possible standards of animal health.

Meat Inspection—This course deals with the various regulations relating to the conditions under which government inspection is granted and maintained at abattoirs, packing houses, or other establishments conducting an export trade in meats and meat food products. Particular attention is given to the sanitary conditions observed by establishments under inspection and for the proper inspection of animals before and after slaughtering, as well as the preparation, process of manufacture and packing of meat food products, and official marking of carcases and the certification of meat and meat food products which is essential for the encouragement and continued development of domestic and foreign trade in these commodities.

The course in meat inspection is presented in such a manner as to so train the graduate that when he enters general practice, he will have a comprehensive knowledge of the subject, and also to prepare students for entry to the public service as veterinary inspectors under the Health of Animals Branch.

Milk Hygiene—The work of this department deals with the inspection of dairies, and the sanitary production and handling of milk from the producer to the consumer. The subject is covered by a course of lectures in dairy husbandry, dairy inspection, and laboratory exercises in milk hygiene. The practical course includes visits to dairy farms and to large creameries and milk-distributing plants, while the laboratory exercises are related to the chemical and bacteriological examinations of samples of milk and milk products. Many changes have taken place in the dairy industry in the past few years, and the course of instruction has been adapted to meet the developments that have taken place. An endeavour is being made to keep abreast of the times, both from a public health standpoint and in connection with dairy practice.

Poultry Diseases—The course in poultry diseases covers a lecture and laboratory course in poultry husbandry, dealing with the different breeds, judging, housing, feeds and feeding, hatching and rearing, hygiene and sanitation. Particular attention is also paid to diseases of poultry, particularly to the prevention, the suppression and control of infectious diseases.

An extension service is also provided, enabling owners to have a laboratory examination made of diseased birds and to obtain a report on the results of the examination together with information as to prevention and treatment of the diseases in question.

Therapeutics—This department furnishes instruction in obstetrics, materia medica and therapeutics. The course in obstetrics is provided by means of lectures, practical demonstrations, clinical observations, applied treatment, and breeding hygiene. Special consideration is given to the occurrence of sterility in breeding animals interfering with herd efficiency, and diseases occurring in young animals and means of lessening mortality among them.

The course in materia medica and therapeutics furnishes a knowledge of drugs and remedies used for the prevention and treatment of animal diseases and to relieve pain. A special course of lectures and recitations is also given, dealing with prevailing diseases of live stock, and for which special methods may be employed for their prevention and treatment.

Diseases of the Horse—The work of this department comprises lectures and clinical instruction, and covers three academic years. Lectures and classwork are correlated with clinical demonstrations, so that the instruction is both theoretical and practical. During the course particular attention is given to those diseases which are most common and occur most frequently in horses, especially those affecting the respiratory tract, the digestive tract, the nervous system, the urinary tract, heart and blood vessels, the skin, and the generative organs. Clinical demonstrations are given from time to time, so that the student may become proficient in the technique of clinical diagnosis and examinations for soundness, methods of restraint, the administration of medicines, and special forms of technique such as the use of the stomach tube in general practice.

Diseases of Cattle, Sheep and Swine—This department deals chiefly with diseases which are not contagious as affecting cattle, sheep and swine. A selection is made of the prevailing diseases and ailments occurring among each species. The peculiarities of each species are carefully explained, so that the student becomes familiar with the diseases to which each is most liable on account of their mode of living, anatomical and physiological variations. The different diseases are studied as to their etiology, symptomatology, physical diagnosis, prognosis, preventive measures, and the application of therapeutic remedies most suitable to each are discussed and demonstrated as far as possible. The lectures and clinical demonstrations are co-ordinated to afford definite training in the art of diagnosis, clinical observance, proper administration of medicines, methods of restraint and handling, general care and management of sick animals.

Surgery—The course in surgery consists of a series of lectures, recitations and clinical demonstrations. The lecture course is commenced during the third year, and is continued throughout the fourth year. It embraces the general principles of surgery ,namely, preparation of the patient, preparation of the instruments, arranging the operative equipment, preparation of the surgical area, methods of restraint, local and general anaesthesia, surgical pathology and therapeutics, including asepsis, antisepsis, hemostasis, forms of suturing, dressing, bandaging and after treatment of wounds.

Practical demonstrations are given on animals that are brought to the clinic for surgical treatment. Throughout the course students are taught how to make a proper examination of surgical cases, in order to arrive at a proper diagnosis and to extend appropriate surgical treatment. Senior students are required to assist at operations and also to attend to patients as may be required. This department holds surgical clinics for the public on several afternoons each week, to which animals are brought from a considerable distance for special operations requiring skilled surgical technique and suitable equipment.

Canine and Feline Diseases—Owing to the increasing importance of small animal practice, a special course of lectures and demonstrations is given dealing with dogs, their breeds and breeding, and the general principle and practice of canine medicine and surgery. Clinics are also held each week, to which small animals may be brought for examination and operative treatment.

Special Courses

During the month of June a short course was arranged relating to the fur farming industry in cooperation with the Ontario Silver Fox Breeders' Association and the staff of the Government Experimental Fur Farm.

The course consisted of special lectures and demonstrations as follows:

Selective breeding of fur bearing animals.
Market grading of silver fox and mink pelts.
Cause and transmission of infectious diseases.
Practical feeding of foxes and mink.
Parasitic diseases of mink.
Breeding problems.

During the month of July a special course was held for the benefit of veterinary practitioners on the following subjects:

Control and eradication of practical diseases.
Canine breeding problems.
Identification of parasite eggs and larvae.
Common plants poisonous to live stock.
Bovine mastitis.
Milk hygiene and its application.
Recent therapeutic measures.
Problems of the general practitioner.
Special demonstrations and surgical operations.

A series of special lectures were also given by members of the staff to the short courses for farmers and herdsmen held at the Agricultural College.

Public Extension Work

Research and Investigational Work—Owing to the increased amount of routine work we were unable to give as much time and attention to research work as we would like. Reports of some of the investigations conducted are submitted as appendices by members of the staff individually under the following titles:

Outbreak of Breeding Difficulties in a Dairy Herd.
Outbreak of Depraved Appetite in Cattle.
Swine Plague.
Bothryomycosis of Horses.
Encephalomyelitis of Horses.
Pulpy Kidney Disease of Sheep.
Malignant Vaginitis of Cattle.
Tuebrculosis in Fur Bearing Animals.
Control of the Flesh Fly, *Wohlfahrtia vigil.*

Animal Clinics—In this department the practical application of veterinary medicine and surgery is made available. Cases for the clinic come from many parts of the province, being sent in at the suggestion of practising veterinarians and others. In addition to those brought from a distance the agricultural college live stock and other animals in the immediate vicinity of Guelph are frequently presented for clinical observation and treatment.

The nature of these cases is quite varied and all species of domesticated animals are submitted. This is revealed in the following data taken from the 1935-1936 records of the clinical department.

In the past year 185 horses were submitted to the clinic. Surgical cases were preponderant but there were also a number of disease conditions and in a few instances cases of an infectious nature representing ailments affecting a number of animals in the same quarters. There were 73 cattle submitted and in this species sterility cases and breeding abnormalities were most numerous. Conditions such as calf scours, calf pneumonia, hemorrhagic septicemia, Johne's disease, abortion disease, actinomycosis and tuberculosis were brought in for diagnosis and in the main were representative of herd affections.

Upwards of 70 pigs were brought in for examination and treatment. In reference to the swine clinics there are a considerable number of surgical cases, such as hernias, cryptorchidism and other congenital aberrations. These make interesting and useful clinics for surgical intervention of these abnormalities can be clearly demonstrated. Many of the swine cases, however, are disease conditions representative of some affection of a litter or of a herd of pigs and because the history of these outbreaks, the clinical aspect of the case, the post-mortem examination (in some instances) and the subsequent bacteriological findings can be followed through, they make exceptionally useful clinics. The diseases commonly observed are anemia of suckling pigs, gastro-enteritis, pneumonic affections, parasitism and nutritional disturbances. Such infections as those responsible for hemorrhagic septicemia, swine erysipelas, necrotic enteritis and general sepsis are frequently isolated.

The sheep clinics are not so numerous as those of swine but here again certain cases are brought in as examples of flock conditions and include such diseases as parasitism, pregnancy disease, hemorrhagic septicemia, lambing troubles and nutritional imbalances.

The number of patients in the small animal clinic increases from year to year and in the past term 236 dogs, cats and other pets were submitted for examination and treatment. Many of the cases are surgical in character but there is a considerable number of patients suffering from the various ailments peculiar to the canine and feline species, mange, distemper, chorea, gastritis, eczema, fractures and dietary errors being illustrative of the most common disease conditions submitted.

The greater part of the foregoing activities of this department are accomplished during the instructional period of the college. In the interim the work is confined to occasional examinations of exceptional cases, to extension service in the form of investigations of outbreaks of diseases and assistance to practitioners in a consultation capacity.

Preparation of Biological Products—Seventy-three thousand, three hundred and fifty test doses of *S. pullorum* antigen, and positive and negative control sera were distributed to veterinarians for the agglutination test for

S. pullorum infection in poultry (white diarrhoea). Eighteen thousand, one hundred and fifty test doses of *Br. abortus* antigen were also sent out for use by veterinary surgeons for the diagnosis of Bang's disease in cattle (contagious abortion). It is gratifying to note that each year more veterinarians are qualifying themselves to conduct the agglutination test for *S. pullorum* and *Br. abortus* infection.

Serological Tests—These are commonly known as blood tests and are widely used for the diagnosis of Bang's disease in cattle (contagious abortion). For the diagnosis of Bang's disease 15,398 blood samples were submitted to the agglutination or blood test for B. abortus infection. Included in this number were 660 pure bred cows intended for export to the United States. The results of these tests are as indicated in the following table:

BLOOD SERUM EXAMINATIONS FOR BANG'S DISEASE

Animal	Disease	Number of Samples Received	Positive	Doubtful	Negative	Unfit for Testing
Cattle	Bang's Disease (Infectious abortion)	15,398	2,028	867	12,330	173

LABORATORY EXAMINATIONS—During the year 2,343 specimens were received for laboratory examination as indicated in the following tables:

PATHOLOGICAL EXAMINATIONS

Nature of Case	Cattle	Sheep	Horses	Swine	Dogs	Cats	Rabbits	Birds	Fox	Mink	Fish	Total
Tuberculosis	4	....	....	....	....	....	....	....	....	3	....	7
Neoplasms	....	....	4	2	37	4	....	....	....	....	....	47
Parasites	5	....	2	17	11	5	9	2	12	6	4	73
Enteritis	5	....	....	17	1	2	1	....	....	3	....	29
Pneumonia	6	5	3	21	4	1	....	....	1	5	....	46
Peritonitis	....	....	1	....	....	....	....	....	....	1	....	2
Nephritis	1	1	1	1	1	....	....	....	2	2	....	9
Tissue from Operations	3	....	6	2	5	....	....	....	....	....	....	16
Hemorrhagic Septicemia	6	6	....	15	....	....	....	....	....	....	....	27
Gastritis	....	....	1	11	3	....	....	....	2	2	....	19
Food Poisoning	6	2	3	....	....	....	....	....	....	7	....	18
Abortion	5	....	....	....	....	....	....	....	....	....	....	5
Anemia	....	....	....	10	1	....	....	....	1	2	....	14
Pericarditis	1	....	1	....	1	....	....	....	....	....	....	3
Mastitis	98	....	....	....	....	....	....	....	....	....	....	98
Johne's Disease	1	....	....	....	....	....	....	....	....	....	....	1
Hepatitis	2	....	3	1	4	....	....	....	....	....	....	10
Actinomycosis	4	....	....	....	....	....	....	....	....	....	....	4
Examination of Pus	36	....	5	1	....	....	....	....	....	....	....	42
Blood Tests	4	....	....	1	....	....	....	....	....	....	....	5
Abscess	3	....	....	....	1	....	2	....	....	....	....	6
Meat Inspection	10	....	....	7	....	....	....	8	....	....	....	25
Miscellaneous	19	9	3	12	6	....	....	12	11	2	5	79
Total	219	23	33	118	75	12	12	22	29	33	9	585

POULTRY DISEASES	No. of Cases
Adult pullorum infection	124
Ascites	13
Avian Diphtheria	2
Coccidiosis	327
Colds and Roup	22
Cloacitis	2
Enterohepatitis (turkeys)	19
Enterohepatitis (chicken)	17
Fowl Cholera	28
Laryngo-tracheitis	54
Leucosis	35
Pneumonia	2
Pullorum Disease of Chicks	377
Tuberculosis	49
Duck and Goose Septicaemia	4
Neurolymphomatosis	6
Other Infections	26
Volvulus and Impaction	7
Transient Paralysis	2
Egg Bound	6
Enteritis	44
External Parasitism	1
Fatty Degeneration of Liver	1
Impaction of Crop	4
Injuries	15
Nutritional Disorders	138
Prolapse	4
Poisoning	2
Ruptured Liver	4
Ruptured Oviduct	2
Tumours	36
Worms (ascaridia)	100
" (capillaria)	31
" (large tape)	133
" (minute tape)	52
" (round and tape)	19
Putrid and not diagnosed	50
Totals	1758

Throughout the year an immense volume of correspondence has received attention, as well as daily personal interviews with those concerned seeking advice regarding diseased animals.

Much of this routine work is of an exacting nature requiring careful and painstaking effort in extending helpful guidance.

The entire staff have been kept fully occupied and have performed their duties in a diligent and competent manner.

All of which is respectfully submitted.

C. D. McGILVRAY,
Principal.

Guelph, Ontario,
March 31st, 1936.

BREEDING DIFFICULTIES IN A DAIRY HERD

R. A. McINTOSH, M.D.V., B.V.Sc.

The herd numbered about 30. Of these 12 were milk cows and 1 the herd sire. This sire had been purchased in February and was used for service about the beginning of March for the first time. Since that time he had been used on a considerable number of the cows and the majority of them would apparently conceive for they would pass the usual estral cycle of three weeks and perhaps come back in 4 or 6 or 9 weeks. Not one of the cows bred had conceived up to the above date unless it was one or two that had been bred in the previous two or three weeks. A neighbour also used this same sire for service on a number of cows and his experience was the same. His cows failed to conceive and he discontinued the use of this bull as a sire. The owner had bred 9 cows and his neighbour six.

The attending veterinarian was under the impression that there was a vaginitis more or less general in the herd and accordingly a number of the cows were examined. Cow No. 1, Mildred, had been bred 7 weeks previous to the examination and estrum recurred in 6 weeks. There was some evidence of vaginitis in this cow for it appeared somewhat inflamed and flakes of pus could be seen in the exposed folds of the vulvar and vaginal mucosa. The cervix was grasped with cervical forceps and exposed at the vulva and here again flakes of pus were noticed in the cervical folds. The uterine catheter was passed and material from the uterus obtained. Feeling that trichonomads might be the causative factor this material was examined for them but the slides were negative. The 2nd cow (Rose) examined had a history of being bred 9 weeks and then repeating in estrum. She too manifested a degree of vaginitis and the same procedure was followed as in cow No. 1. With the return flow cathether some bloody mucous was obtained from the uterus and it was subjected to a careful microscopic examination but was again negative to trichonomads. The vulvas and vaginas of all of the cows were examined and swabs taken from them. In each case there was some evidence of nodules such as are commonly observed in cows suffering from genital infections.

The sheath of the bull was examined and swabs taken from it. Microscopic examination was negative for trichonomads. An aged cow (Pansy, No. 9) was in oestrum. This cow had never been bred to this bull. A swab of her oestral mucous was obtained and no trichonomads were observed, and also on subsequent plating for bacterial growth it was sterile. Her vagina was douched and service was permitted. The act of copulation was observed and the genital organs of the bull were apparently normal. Subsequently seminal fluid was obtained from the cow and it appeared altogether too yellow in colour. Swabs of it were obtained. A microscopic examination revealed numerous spermatozoa but much too great a percentage of them were immobile and in addition many of those which were motile had their tails sharply bent and would propel themselves backward instead of forward. A number were observed without tails.

The following day another microscopic examination of all this material in stained smears was made. Bacteria of different types were observed on a number of the slides. The samples were then plated out on agar and the following data indicates the number of the bacterial growths observed after incubation.

1. Mildred—vagina—*Colon bacillus.*
2. ” —cervix—*Staphylococcus aureus.*
   Colon bacillus.
3. ” —uterus—*Staphylococcus aureus.*
4. Rose —vagina—*Staphylococcus aureus.*
5. ” —cervix—*Colon bacillus.*
6. ” —uterus—No growth.
7. ” —bloody mucous—*Colon bacillus.*
8. Bull —prepuce—*Streptococci.*
   Colon bacillus.
   Staphylococcus aureus.
9. Pansy —oestral mucous—No growth.
10. ” —semen after copulation—*Colon bacillus.*
11. ” —semen after copulation—*Colon bacillus.*
    Staphylococcus aureus.
12. Jersey —vagina—No growth.
13. Mary —vagina—No growth.
14. Joe —vagina—*Streptococci.*
    Colon bacillus.
15. Maud —vagina—*Colon bacillus.*
16. Schmidt—vagina—*Streptococci.*
    Colon bacillus.

The most common growth was that of the colon bacillus but this was not considered pathogenic. The next most common was a *Staphylococcus aureus.* This appeared in swabs from the first two cows examined which manifested the greatest degree of vaginitis. It was also found in the growth from the swabs taken from the prepuce of the bull, and again from the seminal fluid obtained from the vagina of the cow bred. (It was previously noted that the oestral mucous of this cow was sterile taken before service by the bull.) The fact that the cultures from swabs taken from the sheath and seminal fluid revealed the presence of the "*Staphylococcus aureus*" indicates the possibility of this organism being responsible for some diseased process somewhere in the genital tract of the bull interfering with the fertilizing power of his spermatozoa.

Growths of streptococci were observed on the plates of two of the cows and also from the sheath of the bull. This is the most pathogenic of all the organisms observed but because it did not appear in the worst cases of the cows and only from the sheath of the bull it was felt that in all probability it was only incidental.

The owner of the herd stated his herd had been tested for abortion disease and he had gotten rid of all the reactors. He also stated that the bull when purchased was supposed to be free from that disease. Previous to obtaining this bull the owner said he had never experienced difficulty getting his cows settled in calf. The previous breeding record of the bull was not known.

From the history obtained and the findings observed in the examination of this herd it would appear that the sire is at fault and it may be due to a staphylococcus infection of his reproductive organs. Two of the cows showed a degree of genital disease which might temporarily interfere with conception, but this could not be said of the remainder.

OUTBREAK OF DEPRAVED APPETITE IN CATTLE

R. A. McINTOSH, M.D.V., B.V.Sc.

This investigation was undertaken at the request of the Agricultural Representative who had received a large number of complaints from farmers in Yarmouth township.

On the first farm visited a herd of twelve good milking Holsteins was kept. Since turning the cows out on pasturage two or three weeks before a number of them had manifested depravity of appetite, two of them being particularly bad. During the stable feeding period they had been fed hay, silage, straw and roots for roughage. The grain ration consisted of oat and barley chop mixed. The owner had noticed that in the latter stages of the winter the cows had not been doing quite so well although they appeared in good flesh. Bones which cows had been chewing were picked up in the pasture where they were grazing.

On the second farm the herd consisted of 21 head, about half the number being milk cows. The winter feeding rations consisted of hay, silage, and roots for roughage and oat and barley chop with 10% soya bean meal as a protein supplement for a grain ration. A mineral mixture had been fed all winter. Two weeks before being turned out the cows were not doing well and shortly after being put on pasture eight of them which were milking started chewing bones, rotten wood, etc. Since being turned out the mineral supplement had not been fed and the grain ration was cut down a little.

Three other farms were visited and their herds inspected, the history of the condition, the character of the food, the methods of care and management were much the same as the foregoing. It was learned in reference to one of these herds two cows were so badly stiffened and incapable of movement that the owner had them destroyed. Others were so stiff when turned out that they could scarcely get their heads to the ground to graze. They were improved after two weeks on the grass. Blood samples for phosphorus and calcium determinations were taken from three 3-year-old cows. Herd management was not good and the grain ration provided was inadequate. Two of these farmers mentioned that some of their animals showed the condition last year and a blood sample was taken from one of the cows which was stiffened both last year and this year.

By way of comparison another farm in this vicinity was visited where there was no evidence of the disease. There was no difference in the character of the soil or the nature of the feed provided except that this farmer fed very liberally of oat and barley chop.

The phosphorous determinations on the bloods of the worst affected herd were very low, being 2.30, 2.22, and 1.77 mgms. per 100 c.c. blood. Normally it should be about 5. in 3-year-old cows. In the case of the cow which was also affected last year it was 3.37 which again is much too low.

The foregoing observations and findings definitely indicate a nutritional deficiency in which the element phosphorus was lacking in the rations provided for the animals.

SWINE PLAGUE

With Observations on an Experimental Case

T. LLOYD JONES, B.V.Sc., M.Sc.

Swine plague or hemorrhagic septicaemia is a serious disease of swine in the Province of Ontario. The disease occurs most commonly in Fall and Winter litters and chiefly affects young pigs shortly after they are weaned. A consideration of the factors contributing to the production of the disease will suggest reasons why outbreaks occur at this time.

In addition to *Pasteurella suiseptica* as the bacteriological cause, there is no doubt that factors which lower the normal resistance of a herd are necessary to initiate an outbreak. Some of these factors still remain obscure while many are well known to the competent swine husbandman.

Smith (1) and Moore (2) have demonstrated the presence of the causative organism in secretions from the posterior nares, the pharynx and larynx of apparently healthy pigs. Organisms thus isolated could not be distinguished by their cultural characters from these obtained in cases of swine plague, and all had pathogenic properties. They varied greatly in virulence however; some being lethal to rabbits in sixteen hours while with others rabbits did not succumb for as long a period as thirteen days. Because the organism is present in many healthy animals it is evident that its virulence and the conditions which enhance its virulence are of great importance.

Another factor is the resistance of the animal, and it may be laid down as a general rule that resistance is greatest in those which are healthy and normally developed. Hence, a healthy pig is not only free from disease but is also possessed of greater resistance. This axiom has a bearing on the remarks which follow.

When young pigs are weaned they are frequently exposed to influences which lower their vitality. They lack the warmth of the sow, and are frequently housed in a dark, damp pen with insufficient bedding. Unless they have commenced to feed from the trough prior to weaning they are subjected to a complete change of diet. Often the grain which is fed is coarse and sometimes the hulls have not been removed. The irritated gastric mucosa is undoubtedly a frequent portal for the entrance of infection.

Swine plague is likely to appear in pigs shortly after weaning if they have suffered from anaemia while nursing the sow. Animals subjected to hardships of shipping and unusual exposure to cold and rain are rendered less resistant, while parasitism, particularly infestation with lungworms and migrating ascarid larvae produce a debilitating condition.

These observations lead to the conclusion that in many cases swine plague has as its primary cause, poor husbandry. Proper care in the matter of sanitation, feeding and good management should lessen the occurrence of the disease.

Frequently it has been our experience that pigs showing symptoms of swine plague when brought into the laboratory have recovered with no treatment other than to place them in warm quarters with ample dry bedding and a ration of finely ground grain and milk.

The writer has failed in several attempts to produce the disease experimentally in pigs kept under normal conditions. The feeding of affected organs of a pig from which *P. suiseptica,* lethal to rabbits, was isolated, did not give rise to symptoms; likewise, feeding recently isolated cultures gave negative results. Subcutaneous, intratracheal, intrathoracic and intraperitoneal injections of similar cultures failed to produce the disease. The following remarks describe the only case of swine plague experimentally produced and resulted from the intraveneous injection of a recently isolated culture.

The thoracic viscera of a pig was received for diagnosis, with a history that six had died in the same litter. The lungs showed acute inflammation and gave a pure culture of a Gram negative short pleomorphic rod on blood agar plates. This organism was inoculated into fermentable media and gave acid in glucose, sucrose, levulose, galactose and mannite. No acid was produced in lactose and maltose. A pure culture of approximately 1600 colonies on a blood agar plate was suspended in saline and injected into the ear vein of a 3½ months old pig. A control pig from the same litter remained in the same pen and did not show any symptoms throughout the experiment. Temperatures were recorded as under.

Table of Temperatures

Time	Temperatures	
	Subject Degrees F.	Control Degrees F.
Preinjection temperature	104	104.4
24 hours after injection	105	103
48 " " "	104.1	102
72 " " "	102.6	102.8
96 " " "	100	103.6

Within 24 hours the injected pig was down and showed little tendency to move. When made to rise it showed considerable weakness particularly in the hind quarters. Although it was too weak to stand it would feed when assisted to the trough. A paroxysmal cough developed and dyspnoea was evident. Pain was evinced on purcussion of the thorax. Wthin four days the animal was emaciated and refused feed when taken to the trough. The skin became dry and scurfy. A week after the injection, the respiratory symptoms were still present but the pig was able to stand and began to feed. Adventitious sounds were prominent on auscultation of the thorax and a chronic pneumonia appeared to have become established.

In this condition, with a gaunt appearance, rough coat and, later, with erythema along the ventral abdominal regions, medial thighs and axillae, the animal lingered until it died 41 days after receiving the injection.

On post mortem, the erythema showed as areas of purple discolouration varying in size and confined to the regions mentioned. There was an absence of subcutaneous fat. The lungs, which were attached to the thoracic wall by numerous adhesions, showed a marked lobular pneumonia. In the heart a verrucous endocarditis was prominent on one of the auricular-ventricular valves. The sublingual lymph gland was enlarged and contained caseous pus; other lymph glands were enlarged and hemorrhagic.

There was a hyperplasia of the spleen and this organ weighed 200 Grams. A hemorrhagic enteritis was present in the small bowel. There was swelling in the region of the metatarsal joint.

Serum taken at post mortem had an agglutinating titre of 1:100 with the homologous antigen of a density equal to No. 1 tube on Marfarlane's nephelometer.

Smears from the lesion on the heart's valve showed numerous Gram negative bacilli. Cultures giving the same reactions as the original organism were isolated from this lesion and from the heart's blood, lungs, bone marrow, spleen and sublingual lymph gland.

This case is interesting because of its course. Soon after receiving the injection the animal showed acute symptoms, then recovered and lingered with a chronic respiratory affection but finally died from an acute bacteraemia.

Although the disease was experimentally produced, its course and particularly the post mortem appearances suggest the complexities which may arise in the differential diagnosis of some of the infectious diseases of swine. Cultural or serological findings are necessary to establish the true cause of the disease: in many cases however this has proved to be difficult.

In addition to improved husbandry, it is certain that losses among swine would be lessened by improved methods of diagnosis and more intelligent biological treatment—a possible outcome of much needed research.

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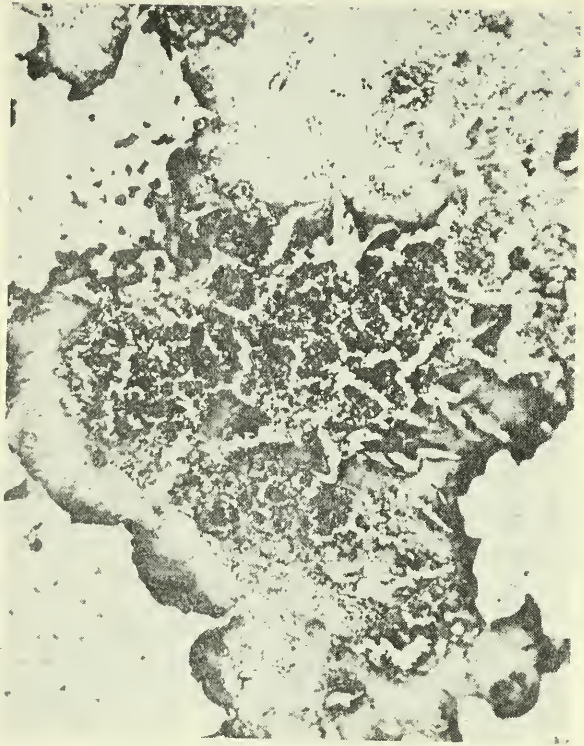
2. Moore, Veranus A.—Pathogenic and Toxicogenic Bacteria in the Upper Air Passages of Domesticated Animals.—U.S. Dept. Agr. B.A.I. Bul. 3, 1893.

BOTRYOMYCOSIS

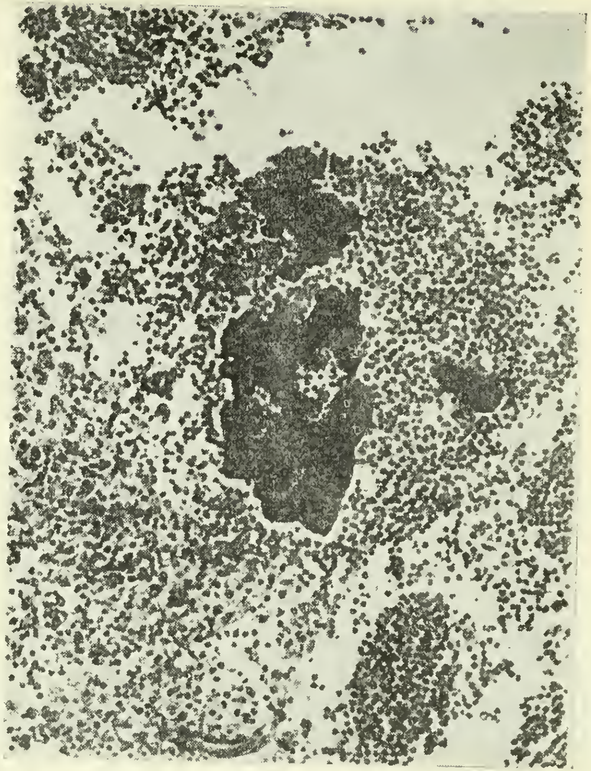
FRANK W. SCHOFIELD, D.V.Sc.

Two cases of this disease have been treated in the college clinic during the year.

Case 1. The subject was a six-year-old virgin mare. The mammary gland was greatly enlarged due to a tumor-like mass which distended the gland and spread along the floor of the abdomen for a distance of eight inches. The mass was firm and numerous small fistulae, discharging pus, opened upon the surface. The diseased tissue was removed surgically and weighed approximately ten pounds.



Colony, showing the cocci of which it is composed.



Typical botriomycotic colony. (Note the regular border, the polymorphs which surround it, with endothelial cells on the left hand side.

Gross appearance—The mass was composed of dense fibrous tissue, throughout which were scattered numerous small abscesses. The pus was of a creamy consistency.

Microscopic appearance—Tissue sections stained with haematoxylin and eosin show the presence of deeply stained (eosin) irregular colonies with a sharply defined border. These are usually surrounded by polymorphonuclear leucocytes while numerous endothelial cells and plasma cells with a few giant cells form the bulk of the cellular exudate. Masses of dense fibrous tissue abound. Tissue sections stained by Gram's method show the presence of numerous positive cocci within the colonies. Cultures of the pus show the presence of *Staphylococcus aureus* in pure culture.

Case II. The subject was a young mare with a history of a punctured wound in the breast. There was a wide spread, diffuse hard mass involving the greater part of the pectoral region and spreading upwards toward the left shoulder. Several small sinuses were discharging pus upon the surface. As the infection had become too wide spread for surgical interference, the animal was destroyed.

Both the gross and microscopical appearance of the tissue were identical with the description already given for the first case.

Differentiation from actinomycosis or actinobacillosis is easily made, due to the difference and essential nature of the colony. The colonies in botryomycosis have regular borders and are composed of masses of cocci, both degenerate and living.

EQUINE ENCEPHALOMYELITIS

A Histological Study of the Brain Tissue from Several Different Sources.

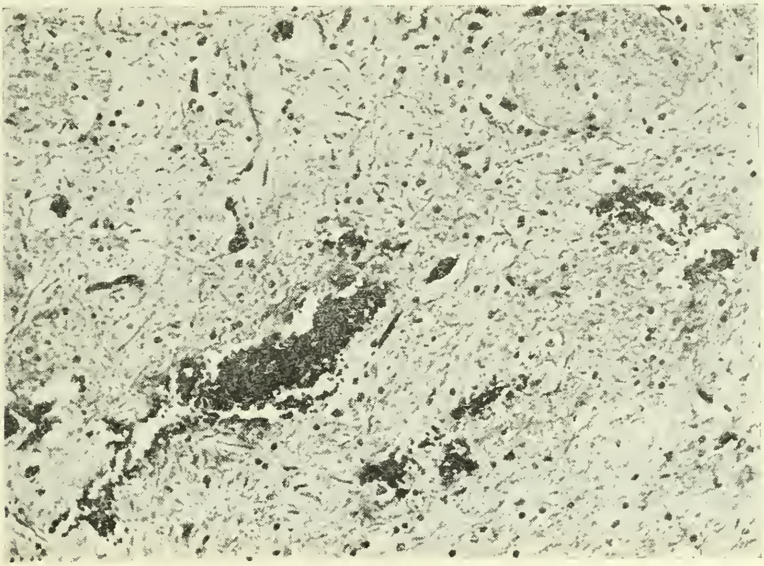
FRANK W. SCHOFIELD, D.V.Sc.

The tissue used in this study came from four different sources, namely, a brain from a known case of encephalomyelitis received from Dr. Records, Reno, Nevada; a brain from a typical case which occurred during the Manitoba outbreak of 1935. This was sent by Dr. Stanley Thompson, Virden, Manitoba. The third brain, or rather portions of a brain, was forwarded by Dr. J. S. Fulton, Veterinary Department, University of Saskatchewan. This tissue was obtained from a typical case which had been studied during the outbreak in Saskatchewan in the summer of 1935. The fourth brain examined came from a suspected case of the disease which occurred in the Province of Ontario. Thus the tissues studied came from widely separated localities.

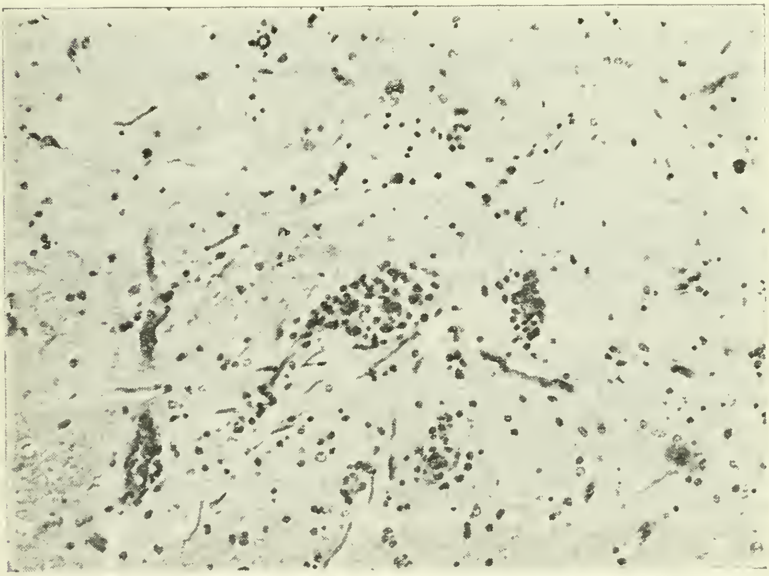
Sections were made from the following areas of the brain: the cortex, corpus striatum, caudate nucleus, cerebellum and medulla. Both haematoxylin and eosin and cresyl violet were used in staining.

Results—One brain, that originating in the Province of Ontario, showed no evidence of pathological change except a general congestion of the capillaries. Although a clinical diagnosis of encephalomyelitis had been made, it is most unlikely that such was the disease. Animal inoculation of fresh brain emulsion proved to be harmless.

The three other brains all showed marked pathological changes, which



Encephalomyelitis. Haemorrhage in the medulla.



Encephalomyelitis, showing foci of cell infiltration.

were similar in nature, but different in degree. The pathological conditions observed, given in order of frequency, are as follows: cuffing of capillaries, oedema, cellular infiltration of the supporting tissue and haemorrhage. These lesions occurred with greatest frequency in the corpus striatum and caudate nucleus, while the cerebellum was least affected. The cerebral cortex and the medulla showed definite but slight changes.

In the tissue from Saskatchewan, the cell infiltration of the brain tissue was very marked, while the capillaries showed heavy cuffing. Characteristic of the tissue from Nevada was the presence of numerous pholymorphonuclear leucocytes. These cells were very scarce in the other tissue examined. Foci of cell infiltration was present in most sections. There was no evidence that such was related to neuronophagia. In fact neuronophagia was not observed The cells composing such foci were the lymphocytes, endotheloid cells, with a few polymorphonuclears.

Degeneration of the neurons was marked but there was every likelihood that this was chiefly due to post-mortem change.

The points of chief interest were the almost entire absence of polymorphonuclear cells in the tissue which came from Manitoba, and the absence of neurophagia in all the tissue studied.

PULPY KIDNEY DISEASE OF LAMBS

FRANK W. SCHOFIELD, D.V.Sc.

This disease, which chiefly affects lambs, has been investigated by Bennetts (1) in Australia and Oxer (2) in Tasmania. In the latter country the losses among lambs have frequently been serious, while in Western Australia the same infection is the cause of very heavy losses among sheep. The disease in sheep, with its slightly different manifestation, is known as *infectious entero-toxaemia.*

The disease of lambs received its descriptive name from the extensive damage to the kidney which occurs in most cases. The kidney tissue has the appearance of a mass of pulp held together by means of the capsule. The acute paranchymatous degeneration of the kidney is attributed to the specific action of a toxin which is formed in the intestine of the affected lambs. The organism producing the toxin is closely related to *Cl welchii* and has been named *Clostridium ovitoxicus.*

This brief report records the occurrence of "pulpy kidney disease" among lambs on a farm in the Province of Ontario. The cause was not ascertained but was in all probability due to *Cl. ovitoxicus* or a similar clostridium.

The owner reported the loss of five lambs during the summer, and one in the early fall. In several cases the kidney was noticed to have a very soft pulpy appearance. In every case the disease was rapid in its course, the lambs being "found dead," and no previous symptoms of sickness having been seen by the owner. Pieces of the intestine, the lung, and the pulpy kidney were preserved in formalin and forwarded by Dr. Booth, Gananoque, Ontario, to the laboratory for examination.

Kidney—The soft structures of the kidney had almost entirely disappeared and were floating around like particles of pulp in the preserving solution. The deilcate fibrous tissue stroma and larger blood vessels of the cortex remained attached like numerous filaments to the medulla. The tissue was not suitable for sectioning.

Small Intestine—Nothing very definite could be determined in the gross, although before preserving it was stated that inflammatory changes were present. Sections stained with haematoxylin and eosin showed desquamation of the epithelium, and the presence of a great many large bacilli, both in the crypts and sub-mucosa. Smears made from the mucous membrane and stained showed large numbers of a Gram positive rod which morphologically closely resembled *Cl. welchii.*

Lung—In the gross the lung tissue appeared normal. Stained sections showed the presence of some fibrosis which was most likely the result of parasitism. While the evidence that these cases of "pulpy kidney disease" were due to *Cl. ovitoxicus* is purely circumstantial, yet the history of the disease, the postmortem and laboratory findings, are in close agreement with the disease described by Bennetts and Oxer.

Mention might be made of the fact that during the last fifteen years, only one other case of pulpy kidney has been observed at the college.

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MALIGNANT DIPHTHERETIC VAGINITIS OF CATTLE

FRANK W. SCHOFIELD, D.V.Sc.

This unusual disease of cattle which is well described by Fleming occurred in a valuable herd of Jersey cattle.

Three animals in succession became infected and succumbed to the disease, although every possible sanitary precaution was taken. In each case the infection followed parturition, symptoms appearing within forty-eight to seventy-two hours of delivery. In no case was the parturition difficult, and the foetal membranes came away readily. There was no indication of damage to the vaginal mucous membrane.

Morbid Anatomy. The lips of the vulva were swollen. The mucous membrane of the vagina was acutely inflamed, with one or more patches of a yellowish diphtheretic exudate. This rapidly spread until the whole surface of the vagina and the os were covered with a tough leathery exudate. Portions of this membrane sloughed, producing a thick, pasty, and rather foetid exudate within the vagina.

A postmortem was made on one animal only. In this case the inflammation was found to have spread through the body of the uterus and invaded the right cornu. The infection had penetrated the wall of the uterus, causing a severe peritonitis, and even reached the floating colon and rectum which were acutely inflamed.

Symptoms. In all cases there was a high temperature, from 105 degrees to 107 degrees F., which was maintained throughout the course of the disease. The pulse was accelerated, 90-100 beats per minute. The appetite was either poor or absent. The disease ran a somewhat rapid course, terminating fatally in all cases. The first animal lived for four days; the second for six days, and the third for ten days. All the cases occurred within one month.

Etiology. From the two cases which were examined bacteriologically an almost pure culture of the Corynebacterium pyogenes was isolated. The organism was present in the vagina, uterus, and fallopian tube. There can be little doubt as to its etiological significance.

It is interesting to note that one other cow which calved at the same time escaped infection, being carefully quarantined in a nearby shed.

Treatment. The usual treatment of irrigation, and the use of antiseptics had apparently no effect on the course of the disease.

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TUBERCULOSIS IN FUR BEARING ANIMALS

A. A. KINGSCOTE, D.V.Sc.

Tuberculosis occurs enzootically at times in ranched raised and wild animals. In the former case the economic loss to the individual ranchers has proved serious. The fact that the disease may be transmitted from animals to man makes its appearance in any species of animal particularly significant.

History—Schofield (1930) reported on the occurrence of tuberculosis in silver black foxes, describing gross and microscopic variations from the typical lesions encountered in other domestic animals. The question of type remained undetermined, although it was decided lack of pathogenicity for birds would exclude its avian origin. Morphologically the organisms resembled the human type but in pathogenicity the bovine. Watson (1936) states cases of well-defined tuberculosis have been found in mink carcasses received from different parts of the country. The strains isolated in these cases were of the bovine type.

During the past year a mink rancher in Southern Ontario reported a death rate of approximately twenty percent over a period of ten months among his animals. Four of these deaths were attributed to obvious causes (parturition and heat stroke). The remainder, fifteen in number, became emaciated and finally succumbed. Two of the carcasses were received at the college and the post-mortem examination revealed they had died from generalized tubercular infections. Other animals were emaciated, and the appearance of boils on the heads of numerous individuals was of common occurrence. Seventy-three percent of the emaciated animals which died were adult females and the remainder, of unrecorded sex, were under one year of age. No adult males succumbed. After the first four months, from the time the first unusual deaths occurred; they increased from 33 percent to 67 percent over the remaining period of six months.

In no instance did more than one animal die in the same pen; a point which suggests the disease is not highly contagious in mink and that some individuals, mostly females, are more susceptible than others.

The meat supply for this ranch was obtained from a non-inspected abattoir. Such food consisted chiefly of beef trimming and, from time to time the *carcasses of lean cattle, considered unfit for human consumption.* No milk or poultry biproducts were fed at any time. Thus, it seems extremely probable the origin of infection may have been tubercular beef. This suspicion is further confirmed by the fact that animal inoculations (vide infra) proved the organism to be of the bovine type.

Following the information that tuberculosis existed on the ranch, the owner paid particular attention to his meat supply, disinfected all pens, placed each animal in individual enclosures, and pelted all individuals that appeared thin or in any other form indicated signs of ill health. Minor changes were made in the diet upon our recommendation, with a view of building up the resistance of the animals in general. For the past six months we have been in regular communication with this ranch. No further deaths have occurred and the animals are all reported in good condition. In reviewing the history of the outbreak, it appears likely that a number of animals became infected as the result of feeding tubercular beef, that the disease ran a chronic cause, eventually becoming generalized in the infected individuals, and that at the time our diagnosis of tuberculosis was made it had practically run its course. The pelting of the remaining suspicious animals appears to have completely eradicated the disease in this ranch.

Pathology—The carcasses examined were emaciated. The tubercular lesions involved most of the abdominal and thoracic viscera. There was marked tubercular peritonitis. The lesions, as a whole, were typical of tuberculosis. In this respect the lesions in the mink differed from those of the fox (Schofield, 1930). The mesentery was completely covered with lesions. These obscured the lymph glands and infiltrated the walls of the intestine at all points of contact. The mass was composed of nodules fusing with one another. In colour they were a light yellowish white marked with irregular zones of congestion. The kidneys contained isolated tubercles which protruded from the cortex. Lesions in the spleen and liver were not conspicuous. The abdominal cavity contained a small amount of purulent fluid. The lesions in the lungs were secondary. They consisted of numerous minute miliary tubercles involving both lobes. On the surface these tubercles were slightly raised, appearing as yellowish-white spherical or irregular nodules, seldom more than one millimetre in diameter or width but sometimes from three to six millimetres in length. Some of the elongated tubercles possessed three or more branches. In a few places the adjoining tubercles fused together. The individual appearance of the pulmonary tubercles was quite characteristic. They consisted of two distinct zones; an outer translucent dark zone and a central caseous mass much lighter in colour. On incision the tubercles were comparatively firm. There was no evidence of calcification.

Slides prepared for microscopic examination showed, in the lung lesions, pathological changes suggestive of tubercular lesions—again differing in this respect from lesions of similar origin in the fox (Schofield, 1930). The youngest tubercles consisted of spherical masses of cells resembling the endotheloid type in other animals. These cells were large, their cytoplasm stained well with eosin; the usually single nuclei were spherical, stained solidly with haemotoxylin and were generally eccentric. The cells in the centre of the young tubercles showed signs of degeneration. In no instance were giant cells observed. In each case the capillaries surrounding the tubercles were congested. The next stage in the development of the tubercles showed an increase in size of the nodules. The central mass of cells had perished, although the outlines of some could still be discerned. The collected mass of nuclear debres caused the centre of the tubercles to appear quite blue. Outside these zones more cells of the endotheloid type collected. These were interspersed with small mononuclear leucocytes; the latter increasing in numbers towards the outer boundaries of the tubercles. In the same lesions evidence of connective tissue proliferation was apparent. The oldest tubercles observed showed a caseous central area now pink in colour and marked with numerous small, clear spaces; outside this was a zone of degenerate cells, then another of apparently healthy cells of the two varieties described above. A wide, loosely arranged fibrous tissue capsule bordered the tubercles.

In the abdominal organs, the intestines especially, the lesions were not so well defined. They involved the sub-mucosa, protruded towards the lumen of the bowel and embedded the distal portions of the glands of Lieberkuhn. The greatest masses of tubercular lesions were, however, between the muscular layers of the intestinal wall and the visceral peritoneum. The longitudinal muscle layer, in most places, was completely destroyed. Congestion in capillaries and small blood vessels was marked. Cells of the endotheloid type were comparatively scarce when compared with the lesions in the lungs while the small mononuclear leucocytes predominated. Fibrous tissue proliferation was diffuse so that no well-defined tubercles were apparent.

Smears made from the various organs and treated with acid fast stain revealed numerous characteristic bacilli.

Material saved from the carcasses of the mink and injected into laboratory animals indicated the organisms were a virulent strain of the bovine type. In two guinea pigs the gross lesions produced were somewhat similar to those in the mink with the exception that the livers of the experimental animals were markedly involved.

Discussion—Considering the enzootic among the mink, *per se*, it appears that the animals which succumbed to the disease were those not in normal health prior to the time they became infected. The fact that a number of animals suffered from boils indicates that their diet was deficient and their resistence low (Law, 1935). In addition to this the majority of fatalities occurred among adult females—which had been pregnant or nursing their litters at a time when, the history suggests, infection most likely occurred.

It seems that the danger of introducing tuberculosis into fur farms lies chiefly in feeding beef or dairy products from tubercular animals or herds. This source of infection might be almost completely avoided by exercising care in the choice of such meat and milk products. Lean carcesses, trimmings, udders and lungs from non-inspected abattoirs, and milk from cows not tested, should be avoided.

Summary—The prevalence and economic importance of tuberculosis in ranched raised foxes and mink is discussed.

The history of an enzootic outbreak of tuberculosis in a mink ranch is given.

A comparison is made between the gross and microscopic lesions in the fox and mink. These are also compared with typical tubercles in other domestic animals.

It is shown that the mink were infected with a strain of the bovine type of tubercle bacillus.

Means of preventing infection are suggested.

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THE CONTROL OF THE FLESH FLY, WOHLFAHRTIA VIGIL AND OTHER FLIES

A. A. KINGSCOTE, D.V.Sc.

During the past few years the flesh fly, *Wohlfahrtia vigil,* has been the cause of numerous cases of fly-maggot infestation in certain sections of Eastern Canada. The bionomics of this fly and the disease, myiasis, which it produces, have been fully discussed in previous reports (1930 and 1934). It was shown that in certain localities the fly deposited its larvae upon children and young animals. In mink ranches, particularly, it wrought havoc, causing the deaths of many animals. Following numerous appeals for assistance, efforts have been made to ascertain the most suitable means to control the parasite on fur farms. From the various experiments tried it appears that the fly proof pens or nest boxes are the most practical and efficient.

Fly Proof Pens—These are only practical in cases where the pens are entirely under cover. The open ends of the pens, flush with the walls of the building, are protected with fly screens, extending along the entire length of the building. The screens are constructed in such a manner they may be easily set up or removed. They are left in place until the young animals' eyes are open, when they are able to defend themselves against the attack of the fly. All windows and doors in such buildings must be provided with well constructed screens. Knot holes and cracks are protected in such a way that flies cannot enter.

Fly Proof Nest Boxes—The majority of mink ranches consist of open pen units. It is not practical to screen the entire pen. As the danger from the fly lies in its gaining entrance to the nest box and depositing its larvae upon the unweaned kittens, protection of the den is usually sufficient. The roof of the den (h) should fit as tightly as possible—that is have no opening through which an insect twice the size of a house fly may pass. As it is necessary to open the lids on hot days further protection must be provided. This is accomplished by having a removable screen (k) resting on a wooden frame or cleat (j) above the nest box (i). Ventilation holes (g) in the sides of the den are protected with pieces of fly gauze held in place with strips of wood. All cracks and knot holes, including those in the floors of raised boxes, must be filled with putty or other suitable material.

The major problem in making the dens fly proof has concerned the openings through which the animals enter and leave. Numerous devices have been considered and the one described here has been proved entirely satisfactory and practical in every way. A permanent or temporary wooden chute

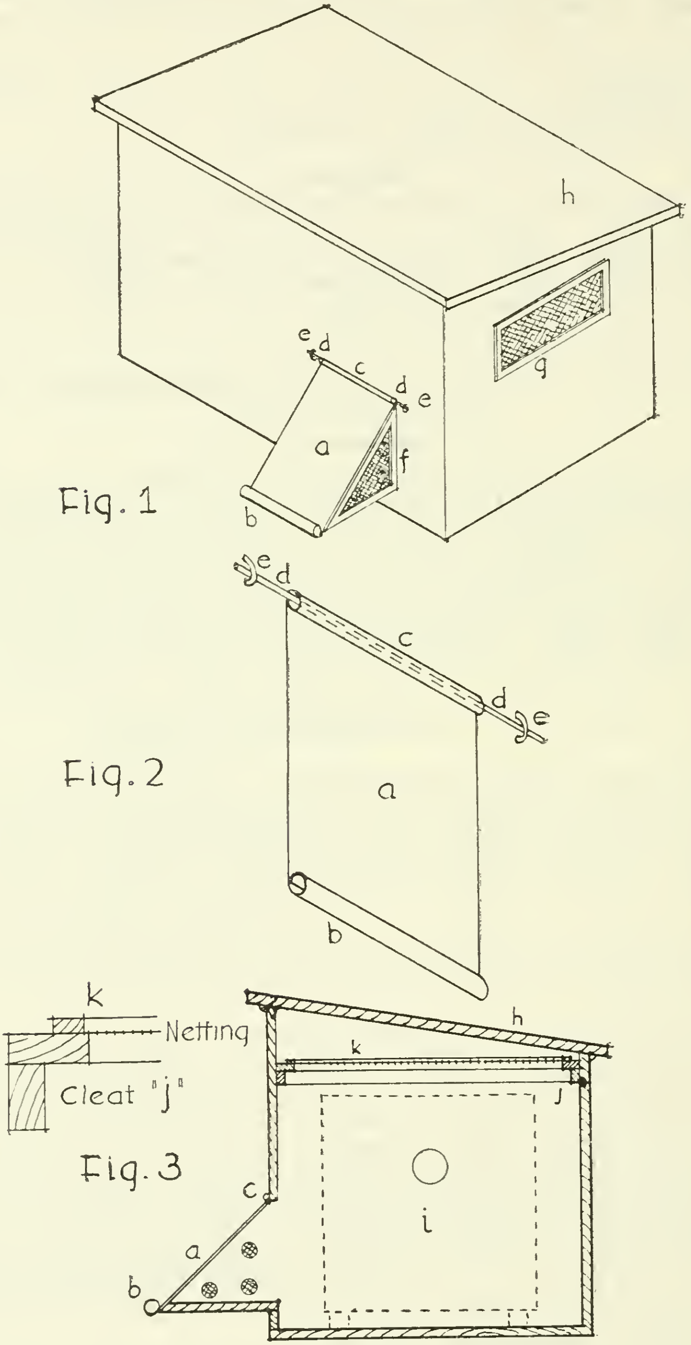

Fig. 1
h
e d
c
d e
a
f
g
b
Fig. 2
e d
c
d e
a
b
k
Netting
Cleat "j"
Fig. 3
h
k
j
i
c
a
b

Method of constructing fly proof pen to exclude **Wohlfahrtia vigil** and other flies. The metal door (a) is opened by the animals and automatically closes as they enter or leave the nest boxes.

(f) is attached to the den. This should be made of wood at least three-quarters of an inch thick to avoid danger from warping. If temporary, it may be provided with a flange which fits into feather ways on the den—thus it is held firmly in place when in use, and may be readily removed by lifting it clear of the featherways. The free end of the wooden chute is cut obliquely at an angle of about 45 degrees. The sides are thus triangular (f). A metal door (a) protects the opening in the chute. The door should be made of medium weight, galvanized metal. Heavy tin will serve the same purpose although it will soon rust and have to be replaced. The upper edge of the metal door is rolled over in order that a strong wire rod (d) may be passed through and serve the purpose of a hinge. Each end of this wire protrudes about one inch beyond the sides of the door. The projecting ends of the wire rod pass through staples (e) partly driven into the wall of the den; thus the hinge upon which the door moves is completed. The sides of the door must fit the cut ends of the chute tightly when the door is closed; they should be flush with the outside edges of the chute. The bottom of the door protrudes at least half an inch below the floor of the chute. This end of the door is rolled over outwards (b). The roll should be about three-quarters of an inch in diameter. The bottom of the roll must be at least two inches from the ground on approach to permit the mink to open the door when entering their den. All rough edges on the metal work are turned over or filed smooth. The hinges may be oiled. Holes are bored in the side of the chute (f) for ventilation. These are protected in the same manner as the ventilation holes in the den (g).

Action of the doors—Several hundred fly proof doors have been installed on mink ranches during the past year. In all cases the animals have soon learned to open them. They do so by placing their noses under the roll (b) and throwing the doors up with a jerk of the head. As the animal enters the chutes the doors slide over their backs and close automatically by their own weight. The cylindrical rolls (b) on the lower end of the metal doors serve three purposes—(1) they make it easy for the animals to open the doors, (2) they eliminate danger of injury which might occur if the lower edge of the doors were sharp metal, and (3) they increase the weight, thus ensuring that the doors close readily and remain closed at all times except when the animals are passing in or out of the dens. The cylinders also strengthen the doors and eliminate the danger of buckling or warping, a factor which, if existent, would permit flys to enter. On leaving the den the animals merely push against the doors from the inside of the chutes. Most animals learn to use them in a very short time. If, after two or three days, certain individuals have not learned the knack of opening them the doors may be propped partly ajar. These fly proof chutes should be attached to the dens some time before whelping. They may be removed after the animals are weaned when the greatest danger from the fly is past. In cases where the chutes are permanent fixtures on the dens, the metal doors may be held open with a suitable catch after the middle of July.

Discussion—Many ranchers who experienced serious losses from infestation with the larvae of *Wohlfahrtia vigil*, in 1934, made the dens fly proof during the past year. Others, even in districts where the fly has not be recorded, protected the dens as a precautionary measure. The results are most encouraging as not a single case of mysiasis in mink was reported last year.

As an illustration of the apparent value of the fly proof dens the history on a particular ranch is given: In 1934, sixty-nine kittens succumbed to *Wohlfahrtia vigil* infection on these premises. The dens were made fly proof and the chutes described above attached. Traps of various types were also set about the ranch. No losses from myiasis were recorded. That the fly still existed in the locality was evident from the fact that several specimens were captured in the vicinity of the ranch.

Another advantage of protecting the dens lies in the fact that other species of flies are excluded. It is the custom on mink ranches not to disturb the dens for a period of several weeks during the whelping and nursing season. During this time flies are attracted to the filth which naturally accumulates; when the nest boxes are eventually cleaned out they contain heaving masses of fly maggots. The maggots themselves, although not of myiasis producing species, are objectionable, but the chief danger, however, lies in the fact that flies attracted to such breeding places may introduce disease organisms. The efforts to exclude *Wohlfahrtia vigil* also overcame unsanitary conditions caused by these other species of flies.

In no case was injury caused by the chutes to pregnant females or young animals. The noise in ranches caused by the banging of the metal doors, especially at night, was sometimes considerable but there is no indication that this disturbed the animals, resulted in abortions or caused the females to neglect their young.

The first chutes installed in ranches contained no ventilation holes. It was found that in June and July this made the dens extremely hot, but the apertures in the sides of the wooden chutes overcame this difficulty. The matter of constructing doors of screen wire or perforated metal was considered. It was tried by a number of ranchers but the preference was given to the plain metal doors, chiefly because they were easier to construct and kept their shapes better. Here it should be mentioned that any doors which do not fit the end of the chute snugly are useless. The doors, too, should be examined from time to time to see that they have not been bent.

Some ranchers, in addition to making the dens fly proof, have placed home-made fly traps at strategic points about the ranches. Others have also used poison baits, such as sweetened five percent formalin placed in reservoirs (on the principal of the automatic poultry drinking fountains) or painted areas on the limbs and trunks of trees (one part sodium arsenite, five parts sugar, and one hundred parts water). The results have proved well worth while as the number of house and blow flies caught was great. These practices combined with proper care of manure, offal piles, and other breeding material, have resulted in a marked reduction of the fly population, not only in the ranch, but around nearby stables and dwellings. Tsetse fly traps of the hanging screen type were tried out in a locality where *Wohlfahrtia vigil* was known to be present. The results were negative.

Summary—Methods of preventing fly maggot infestation in mink ranches are described.

A description is given of the manner in which pens may be made fly proof. The value of fly traps and poisons is described.

The ranches which suffered severely from losses caused by *Wohlfahrtia vigil* in 1934 had no losses during the past year.

In one case it is shown that flies *(Wohlfahrtia vigil)* were present in the ranch, but apparently as a result of practising preventive measures, no fatalities occurred, although during the previous year sixty-nine animals died from myiasis on this same ranch.

In addition to controlling the disease produced by *Wohlfahrtia vigil* the house and blow fly population in the vicinity of ranches was greatly decreased. As a result the dens were found free of fly maggots after a period of five weeks during which time they were not touched. Animals and people suffered less than in any previous years from fly annoyance, and it may be safe to presume that the danger of disease transmission, through flies, was considerably reduced on the ranches.

The ranchers who have practised these preventive measures inform us that the time and labour spent has been profitable from all angles.

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ZOOLOGY IN RELATION TO VETERINARY SCIENCE

H. E. BATT, B.V.Sc.

Among the fundamental subjects essential to the student in Veterinary Science, Zoology must be included as being one of the foundation subjects and should be taught during the early years of the course. The course of Zoology as now given at the Ontario Veterinary College covers the subject from the veterinarian's point of view, always having in mind the needs of the future veterinarian both as a practitioner and as an investigator. Not so many years ago the public were almost wholly concerned with the health and well being of the horse and of cattle. During the last ten or fifteen years, however, conditions have changed so that a knowledge of the whole animal kingdom has become essential to the veterinarian in order that he may adequately cope with the requirements of an ever widening field. The modern veterinarian must have had instruction so that he may survey the whole animal kingdom from a scientific viewpoint. He must understand the reasons for the manner in which animals are classified into phyla and again arranged in the proper order within the respective phyla. In other words, he must understand why a house fly is included in phylum arthropoda, and a cow is placed in phylum chordata, and must be able to give adequate reasons for such an arrangement. The anatomical differences between two such widely different animals as an intestinal worm and a cow are apparent to anyone, but in order to understand and explain the biological similarities of these two creatures a knowledge is required of the fundamentals of life and living creatures.

The course in Zoology as delivered to first year students consists of lectures and laboratory exercises, the lectures being in the nature of explanatory discourses, and the laboratory work being wholly devoted to the microscopic examination of the more minute animals, and dissection of the larger forms. The student is required to make careful drawings from the specimen presented and to compare the description and illustrations in the text book with the actual animal. The instructor describes by means of drawings and diagrams the essential anatomy of the animal or group of animals under discussion.

The course of instruction is commenced by the student dissecting a small mammal (in most cases a rabbit). This method was adopted some years ago in order to give the beginner a knowledge of the appearance and situation of the various organs and viscera and at the same time to enable him to become acquainted with scientific terms so that he may have a starting point to work from. Some weeks are spent upon the rabbit and upon general mammalian characteristics, after which the study of Systemic Zoology begins with phylum protozoa. Living infusorians are examined by microscope after which the disease producing forms of protozoa are taken into consideration. Their nature, form and life history are inquired into. Where possible living specimens are used, as are also prepared and stained examples of some of the more important disease producing members of the group.

Phyla Porifera and Colenterata are treated in such a manner as to corelate their anatomical characteristics with those of the higher forms of animal life in order to show where in the animal kingdom, in a more or less rudimentary form, many of the more important tissues and organs of higher animals may have their origin. The phyla in which are included the worm-like animals are given much attention, especially in regard to the parasitic worms. The student is required to dissect and to make drawings from the various forms of worms and to learn from actual observation the anatomical likenesses and differences upon which the scientific classification of these creatures is based. The life histories of representative groups are explained in order that the student may learn to appreciate the fact that a knowledge of the anatomy and life history of any given parasite is essential when dealing with the control or eradication of such parasite. The instruction in this section of Zoology as presented at the Ontario Veterinary College is in the form of a preliminary course to parasitology, which subject has assumed great importance in recent years.

Phylum Arthropoda is given detailed attention because certain species of animals included therein may act as carriers or spreaders of disease or may of themselves produce disease and are thus of the utmost importance to the veterinarian and to the stock man. In the study of arthropods, their anatomical and physiological characteristics are taken into consideration, typical life histories are explained, and the student learns to differentiate between the various types. The characteristics which determine the classification of arthropods are studied and explained. The various modes of reproduction as occurring among arthropoda are described with a view of instructing the student in the control of flies and other parasitic members of the group.

Phylum Annulata is touched upon as including a group of animals in which certain important anatomical systems have their origin. Phyla Echinoderma and Trochelminthes are not dealt with to any extent because of their relative unimportance to the veterinarian. Phylum Mollusca is discussed because of the importance of some members as food animals and also because some molluscs are intermediate hosts of certain forms of parasitic worms.

Phylum Chordata is given attention, especially the lower members thereof. The student dissects a fish, then later a frog, in order to become familiar with the mode of anatomical development as occurring within the group. The anatomical formation of the chordate skeleton, nervous, respiratory, intestinal, reproductive and muscular systems are discussed and explained, the attention of the student being directed to the recognition of the general chordate plan of development and structure. The anatomical features of the bird and of mammals are described by other departments in the college.

The methods so described are adopted with a view of furnishing the student with information which is considered to be essential to present day demands. There is scarcely a field of endeavour in veterinary science in which a working knowledge of Systematic Zoology is not useful, or indeed, in some cases, necessary. It is almost hopeless to give a student instruction in parasitology if he lacks a grounding in Zoology and, apart from being of scientific and professional value, it would seem that the veterinarian, of all men, should at least have a working knowledge of Zoology and to have a knowledge of the scientific facts relating to the classification of animals.

ANNUAL REPORT

OF THE

Department of Highways

ONTARIO

FOR THE FISCAL YEAR ENDING MARCH 31st
1936

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 32, 1937

ONTARIO

TORONTO
Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty
1937

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To The Honourable Herbert Alexander Bruce,
R.A.M.C., F.R.C.S. (Eng.),
Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

The undersigned has the honour to present herewith for your consideration the Report of the Department of Highways for the Fiscal Year ended 31st March, 1936.

Respectfully submitted,

T. B. McQuesten,
Minister of Highways,
Ontario.

Department of Highways, Ontario.
Toronto, January 19th, 1937.

To The Honourable T. B. McQuesten, K.C., B.A., LL.B.,
Minister of Public Works and Highways, Ontario.

Sir:—

I have the honour to present herewith Report on the activities of the Department of Highways for the Fiscal Year ended 31st March, 1936.

The Report covers operations and functions performed by the various departments, including King's Highways, Municipal Roads, Bridge Construction, Accounting and Motor Vehicles.

I have the honour to be, Sir,

Yours obedient servant,

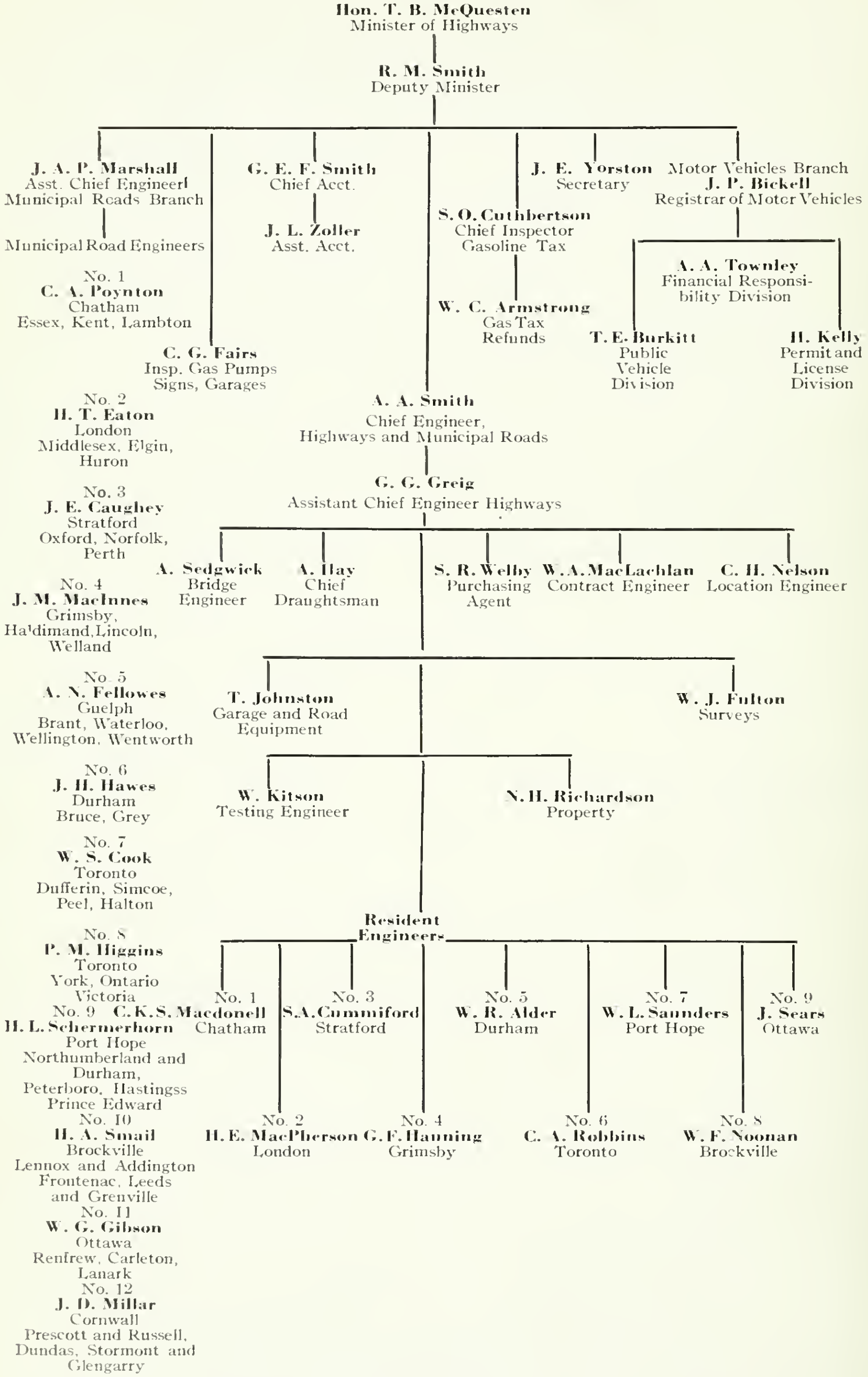
R. M. Smith,
Deputy Minister,

Department of Highways, Ontario,
Toronto, January 19th, 1937.

1935

ORGANIZATION CHART

ONTARIO DEPARTMENT OF HIGHWAYS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Municipal Roads Branch
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ONTARIO AND ITS HIGHWAYS

By R. M. Smith, Deputy Minister

The following report prepared in detail by the heads of the various branches of the Department of Highways, gives an outline of the activities for the year 1935.

This year might truthfully be called the "Stock-taking Year." The new Government coming into power in June 1934 found itself liable to carry on and complete many projects initiated by the previous administration, in fact, a very considerable percentage of the Works Program of 1934 actually carried into the Year 1935.

While actual construction was comparatively light the work of the Department was fairly heavy. Much study and thought was given to future policy, many surveys were completed, traffic and traffic lanes were investigated and much valuable data obtained with a view to future development.

During this year an Amendment to the Highways Improvement Act, which permitted the Province to assume one hundred per cent of the cost of all Provincial Highways, became effective. Prior to this legislation the Counties of the Province were pledged to assume twenty per cent of the cost, this liability applying to both Maintenance and Construction. The Province, by this action, hoped to relieve the taxpayers of the Province approximately $2,000,000 per year. No other legislation of any extensive nature was presented.

In the Motor Vehicles Branch Statistics, will be found, records showing substantial increase in motor car registrations as well as a considerable increase in drivers permits. The improvement in registration is reflected in revenue, the actual return being more than 30% better than the previous equal period.

Increased motor car registration reflects in gas tax returns and again in this branch we can report an 8% increase over the previous year.

A summary of the expenditure and revenue will be found in the report of the Chief Accountant.

REPORT OF THE HIGHWAYS ACCOUNTANT FOR THE YEAR 1935

By G. E. F. Smith, Chief Accountant

To R. M. Smith,
Deputy Minister of Highways·

The following is a summary of Expenditure and Revenue for the fiscal year April 1, 1935, to March 31, 1936.

Expenditure

	1934-35
The King's Highways	$ 4,443,970.74
Grants to Counties	1,834,186.56
Grants to Townships	1,275,249.60
Grants to Indian Reserves	5,658.31
Grants to Connecting Links	4,395.72
Equipment Branch	146,471.52
Administration and Sundries	749,103.64
	$ 8,459,036.09

Revenue

Gasoline Tax	$15,021,993.70
Motor Vehicles	9,144,264.77
Road Assessments	1,768,343.72
Permits, Garages, Signs, etc	67,687.16
Sales of Property	20,570.13
Interest	50,284.40
Miscellaneous	9,219.79
	$26,082,363.67

The Accounting Department audits the books of each municipality in order to ascertain the proper amount on which a grant should be paid.

Since my last report for the year ended October 31, 1934, the Accounting Department has had installed several bookkeeping machines which have proved to be very satisfactory. Systems and methods have also been changed to all round advantage, and especially in the direction of making possible speedier payment to men working on the roads.

Toronto, July 15, 1936.

REPORT OF GASOLINE TAX REVENUE FOR THE YEAR 1935

By S. O. Cuthbertson, Chief Inspector, Gasoline Handling Act

To Mr. R. M. Smith,
Deputy Minister of Highways.

The gross gasoline tax collections for the fiscal year from April 1, 1935, to March 31, 1936, (both dates inclusive), amounted to $16,001,013.26.

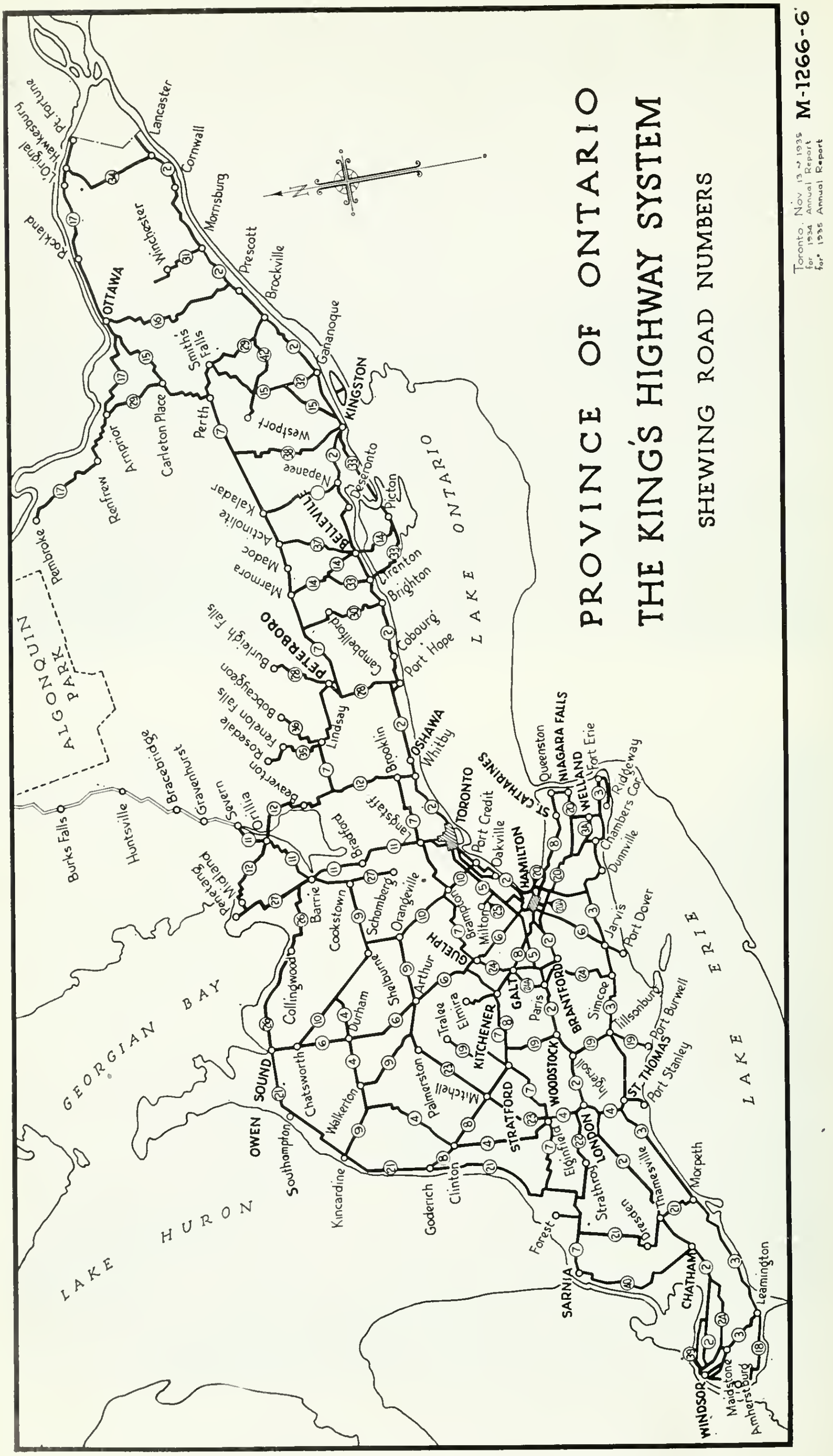
From this amount there were 49,129 claims for refund of tax paid, which amounted to $979,019.56. These refunds were claims paid to farmers, manufacturers, motor boat users, cleaners and dyers, and others who used gasoline for other purposes than propelling a motor vehicle on the highways of the Province.

The net gasoline tax revenue, after having paid the above-mentioned refunds, amounted to $15,021,993.70, for the fiscal period from April 1, 1935, to March 31, 1936, (both dates inclusive)

S. O. Cuthbertson,
Chief Inspector of Gasoline Tax.

Four Lane Pavement West of Aldershot, Looking East, Highway No. 2

Penetration Pavement, Highway No. 33, Looking North, Trenton-Frankford


PROVINCE OF ONTARIO
THE KING'S HIGHWAY SYSTEM
SHEWING ROAD NUMBERS
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Toronto, Nov 13 1935
for 1934 Annual Report
for 1935 Annual Report
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LAKE ONTARIO
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LAKE HURON
GEORGIAN BAY
ALGONQUIN PARK
L'Orignal
Hawkesbury
Pt. Fortune
Lancaster
Cornwall
Morrisburg
Winchester
Rockland
OTTAWA
Prescott
Brockville
Smiths Falls
Gananoque
KINGSTON
Perth
Westport
Carleton Place
Arnprior
Renfrew
Pembroke
Napanee
Deseronto
Picton
BELLEVILLE
Kaladar
Actinolite
Madoc
Marmora
Trenton
Brighton
Campbellford
PETERBORO
Burleigh Falls
Cobourg
Port Hope
Bobcaygeon
Fenelon Falls
Rosedale
Lindsay
Beaverton
Brooklin
OSHAWA
Whitby
TORONTO
Port Credit
Oakville
Langstaff
Bradford
Orillia
Severn
Gravenhurst
Bracebridge
Huntsville
Burks Falls
Midland
Penetang
Barrie
Cookstown
Schomberg
Orangeville
Brampton
Milton
HAMILTON
ST. CATHARINES
Queenston
NIAGARA FALLS
WELLAND
Fort Erie
Ridgeway
Chambers Cor.
Dunnville
Jarvis
Port Dover
Simcoe
Tillsonburg
Port Burwell
GUELPH
GALT
Paris
BRANTFORD
KITCHENER
Elmira
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Shelburne
Durham
Collingwood
OWEN SOUND
Chatsworth
Walkerton
Southampton
Kincardine
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Mitchell
STRATFORD
WOODSTOCK
Ingersoll
ST. THOMAS
Port Stanley
LONDON
Elginfield
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ANNUAL REPORT FOR 1935

KING'S HIGHWAY OPERATIONS

A. A. Smith, Chief Engineer

The year 1935 was looked upon as being rather a lean year as far as construction work was concerned and only work of an urgent nature was undertaken.

A very rigid maintenance programme was carried out as usual, and every effort was made to keep the highways in first class condition. This work entailed resurfacing over 400 miles of gravel road, as well as treating all gravel surfaces with a dust layer of calcium chloride or oil. Other types of road surfaces were well cared for which included the surface treating of 240 miles of Bituminous roads. In addition, such work as shouldering, draining, weed cutting, tree pruning etc., were given every attention.

As part of the usual maintenance programme, over 3,000 miles of roads were kept clear of snow during the winter season. This called for the hiring of sixty (60) large trucks, to which were attached snow plows of various types supplied by the Department. Department owned trucks and plows were placed in districts where snow conditions were the most severe. The snow clearing operations were greatly facilitated by the erection of 1,130 miles of snow fence, which contributed greatly in controlling snow drifting.

All road surfaces were treated with sand mixed with salt or calcium chloride immediately icy conditions occurred, and these operations were carried out many times during the winter season.

In 1935 labour was supplied to the Contractors through the Provincial Department of Labour, with the exception that the Contractors were allowed to engage 15%, who were looked upon as key men.

The Department reserved the right to rotate the supply of labour, men and teams, at two weeks intervals and also required the use of hand labour wherever possible. Certified payrolls were furnished to the Department at intervals as required.

An eight hour day applied for six days a week working period. Minimum rates of pay for labour, truck drivers, men and teams, were embodied in the contract. The minimum schedule of rates for track hauling by the mile was enforced on all paving contracts. This schedule was similar to the one put into operation in 1934.

Under an agreement, the Federal Government contributed 50% of the cost of construction work done on the Trans-Canada Highway between Hawkesbury and Pembroke, this included concrete pavement construction, realignment and grading east of Ottawa, as well as a bridge over the Bonnechere River at Renfrew.

Few changes were made in pavement design or construction. Concrete pavements were laid in 10′ strips, which gave a more even surface finish and provided a well defined centre joint. Steel forms were compulsory, which greatly contributed to the betterment of the pavement. All concrete surfaces were broomed after the usual belting operations.

Few changes were made in bituminous pavements, except more attention was given to obtain a non-skid surface.

Penetration Pavement, Highway No. 33, North of Glen Miller, Trenton - Frankford

A subway was started under the Canadian National Railways at the Martyrs' Shrine near Midland on Highway No. 12. This replaced a very dangerous subway which had been the scene of several serious accidents. The work on this structure was discontinued during the winter months.

Work was also commenced on the new subway under the Canadian National Railways on the Middle Road near Burlington. This subway will eliminate an exceedingly dangerous level crossing of two main line tracks. Work continued steadily throughout the winter.

The mileage of the King's Highways at the end of 1935 was 3,588.12 miles, made up of the various types of surfaces as follows:

Cement concrete pavement	1377.63 miles
Cement concrete —" 10' strip	33.5
Asphaltic concrete	225.32
Mixed macadam	560.91
Bituminous penetration	245.72
Retread pavement	81.00
Waterbound macadam	198.43
Mulch Treatment	6.00
Gravel	859.61
Total	3588.12 miles.

During 1935 the Department assumed 184.83 miles of King's Highways and reverted 5.84 miles to the various municipalities. Amongst the most important assumptions were:

The blue water highway from Goderich to Owen Sound,
Kaladar to Napanee,
The Burford Road from Brantford to Eastwood,

Westport to Forthton,
Maple Avenue in Burlington,
Two roads in Wolfe Island.

The Department did not have a heavy building programme during this year, but completed several sections of roads that badly needed paving. The various types constructed being shown as follows:

20′ concrete pavement	13.68 miles
10′ concrete pavement	13.50
Mixed Macadam	3.6
Bituminous penetration	11.3
Retread	1.0
Mulch Treatment	6.0
Grading	27.5
Bridges	7.0
Bridges (started but not completed)	3.0
Subways started	2.0

RESIDENCY No. 1—CHATHAM

Road No. 2.

Grand Marais Drain culvert near Windsor was extended.

Tilbury Diversion 3.2 miles long was graded, this partially eliminates two grade crossings of the M.C.R., Main Line.

Approaches to the C.N.R., at Thamesville were resurfaced with a cold laid Bituminous surface.

Cut and Fill, Highway No. 19, South of Vienna

Road No. 3.

The abandoned radial tracks through Essex were filled in, using a cold laid Bituminous surface.

The Radial Tracks at Cottam were removed and track sections paved.

Petty piece curve, East of Cottam, was graded and gravelled.

Road No. 7.

A large Municipal Ditch was moved for a length of 2200 feet, 6 Miles East of Sarnia and three new culverts constructed.

4500 Feet of 6″ Tile was laid North and South of Arkona.

Road No. 18.

5000 Feet of Field Tile was installed along Retread pavement between Malden and Amherstburg and Crushed Stone placed on road between Malden and Harrow.

Road No. 21.

Crushed stone was placed on this road between Ridgetown and Thamesville and some gravel from local pits between Thedford and Grand Bend.

South of Thedford a diversion one mile long was fenced, graded and partially gravelled.

Road 21A—Forest.

7.8 Miles of gravel road was stabilized with Calcium Chloride.

Road No. 39.

11,000 Feet of 4½ foot strip Asphalt along concrete pavement West of Tecumseh was resurfaced with cold laid Bituminous surface and shoulder graded.

Road No. 40.

Crushed Gravel was placed on the road between Wallaceburg and Sarnia by contract and 40,000 feet of 6″ field tile was installed to improve the sub grade drainage, 12,000 lineal feet of grade was widened and the River Bank rip-rapped in the vicinity of Port Lambton and Courtright. A curve West of Wallaceburg was graded and gravelled eliminating a right angle turn.

On Residency No. 1 all the gravel roads were treated with either an oil dust layer or calcium chloride, trees were planted at many places under the supervision of the Forestry Department. About 40 miles of snow fence was erected to protect the roads against drifting snow during the winter season.

RESIDENCY NO. 2—LONDON

Road No. 2.

Between Woodstock and Princeton 1.8 miles of old penetration macadam which had become very slippery was resurfaced with an inch of cold laid bituminous surface.

On Roads No. 3 and 4 sections of old concrete pavement were given a skin patch with bitumen and chips.

Cut and Fill, Highway No. 19, Looking toward Port Burwell

Cut, Highway No. 19, North of Eden

Road No. 19.

Between Tillsonburg and Port Burwell 12½ miles of road newly graded in 1934 was followed up with an application of crushed stone and dust layer. The subgrade was further improved by the installation of 40,000 feet of 6″ field tile to drain places that shewed wet and soft in the spring. The high banks in deep cuts were sodded to prevent further moving of their sides where they were through light sand or silty clay.

On this Residency all roads were kept open for traffic during the winter, on account of the severity of the winter with excessive snow, high winds and a considerable amount of ice after sleet storms, the winter maintenance caused a heavy expenditure.

Close-up Overhead Bridge, Highway No. 38, Sharbot Lake

Residency No. 3—Stratford

Road No. 4.

8.41 miles of concrete pavement from Clinton North laid in 1934 was shouldered, ditched and the right-o -way widened and fenced.

Considerable work was done at Londesboro Bridge.

The gravel road from Blyth to Highway No. 9 was patched by day labor.

Road No. 8.

Preston Hill was widened to 30′ by the addition of a 5′ concrete slab on either side of the old pavement and the centre 20′ resurfaced with mixed macadam.

2500 feet of sidewalk was laid between Preston and Galt.

One culvert was removed and replaced and 2 other culverts extended, between Kitchener and Stratford.

Highway No. 2, Looking East toward Etobicoke Bridge

Highway No. 2, Looking West toward Etobicoke Bridge

Road No. 19.

A 55′ span concrete bridge five miles North of Milverton started in 1934 was completed.

A 50′ span concrete bridge three miles North of Milverton was started.

This whole road was given a light coating of gravel.

Road No. 21.

Gravelling operations were carried out from Goderich to Kintail also between Kintail and Kincardine.

Two miles North of Bayfield a large culvert was built by day labor.

Waterloo—Elmira Road.

A gravel gap 300′ long was paved with premixed asphalt and reshouldered. A small intersection on Highways No. 7 and 8 was paved at the same time.

All the gravel roads were treated with oil dust layer or calcium chloride and the whole residency was kept open during the winter, owing to very heavy snow conditions 173 miles of snow fence were required.

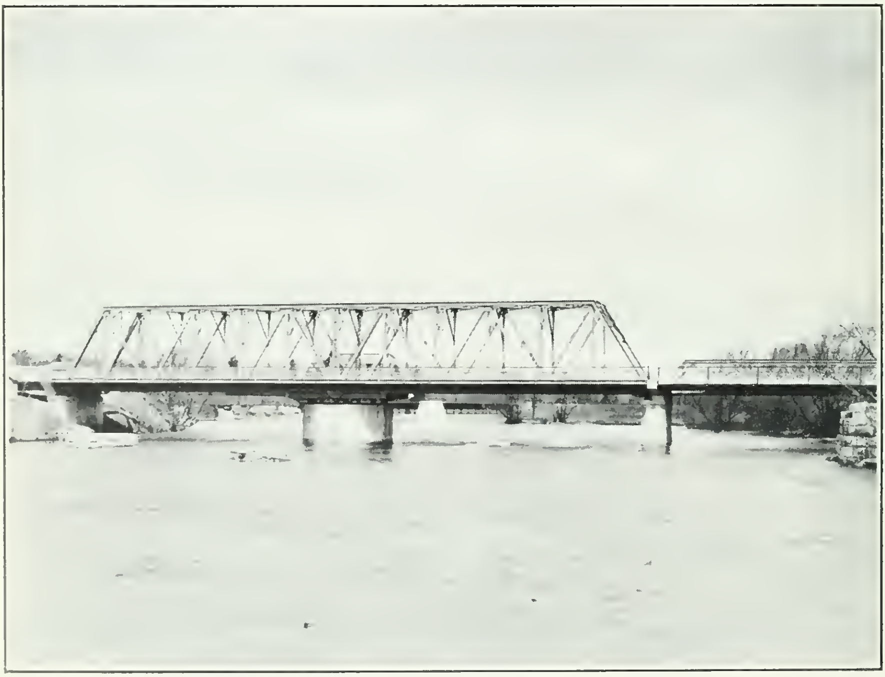
RESIDENCY NO. 4—GRIMSBY

Road No. 2.

The ballast wall on the Toronto end of No. 1 Hamilton Entrance Bridge was badly cracked, the existing ballast wall was cut down and another span built onto the bridge.

A number of short culverts were extended by day labour preparatory to widening the highway between Oakville and Burlington.

The right-of-way of the new 40 foot pavement between Hamilton and Campbell's Corners was graded and trimmed and considerable sodding was done on the slopes.



Long shot of Swing Bridge, Highway No. 7, East of Peterboro

Road No. 20.

The approaches to the new Allanburg Bridge were paved with mixed macadam.

Road No. 8.

A swing bridge with ramp approaches over the Old Welland Ship Canal was removed and the approaches cut down to a good grade, and paved with a penetration macadam pavement.

At 16 Mile creek the old culvert was extended to the North and the bad curve was flattened, and the general vision improved.

The old narrow bridge across Jordan Creek was replaced with a wide, new reinforced concrete one with two sidewalks.

Road No. 25.

Work was commenced late in the fall on the construction of a subway across the C.N.R. at Burlington (Plains Road Subway) on the Middle Road.

On this Residency 43 miles of macadam penetration and mixed macadam were surface treated.

RESIDENCY NO. 5—OWEN SOUND

Road No. 4.

From Flesherton to Hanover the road was gravelled and between Walkerton and Flesherton most of the rail fences were replaced by wire fence.

Road No. 6.

A Mixed Macadam surface was laid for 3.6 miles South from Owen Sound on the old macadam roadway, this completes the pavement between Hamilton and Owen Sound.

Tree Planting was done at all diversions from Durham to Owen Sound.

Road No. 9.

One Mile of concrete pavement was laid westerly from the intersection with Highway No. 22 and the grading and side entrances were finished throughout the whole contract.

Gravelling was done between Cookstown and Alliston. Considerable tree planting was done between Rosemont and Primrose Corners.

Road No. 10.

The road from Markdale to Chatsworth was gravelled and the guard rails completed.

Road No. 21.

Crushed gravel was put on by contract from Kincardine North 11 miles, Port Elgin South 11 miles, Port Elgin to Owen Sound 17 miles, this material was all obtained from local pits.

All gravel roads were treated either with oil dust layer or Calcium Chloride.

All roads were kept open during the winter season.

Residency No. 6—Toronto

Road No. 2.

Grading and culvert extensions were carried out between Brown's Line and East limits of Port Credit.

Storm sewers were constructed between the West end of Etobicoke Creek Diversion and East limits of Port Credit.

A new bridge (150′ span) was constructed over Etobicoke Creek, and the old T.T.C., Bridge, and timber trestle removed.

The South side from Brown's Line to Port Credit was fenced for 1.55 miles and several buildings moved off the right-of-way.

One mile of light grading was completed East of Oakville also three miles of Bituminous Shoulders 12 inches in width on both sides of the road.

Road No. 5.

On ¾ of a mile 1″ cold laid bituminous surface was laid between Erindale and Cooksville.

Road No. 10.

One mile of 1″ cold laid bituminous surface was carried out south of Brampton and 8 miles were surface treated.

Road No. 11.

Further grading operations were carried out to ease the curves at Holland Landing.

The construction of a new bridge at Holland River was commenced.

One Mile of 1″ cold laid Bituminous surface was carried out at Bradford.

Road No. 12.

In Brechin and Gamebridge one mile of salt stabilized surface was built.

North from Orillia N.W., one mile of surface was stabilized using an emulsion.

Stone was crushed and stock piled in Mara Township.

Work was commenced on the diversion of the road and the construction of subway near Martyr's Shrine under the C.N.R.

Road No. 27.

1¼ Miles of 10′ concrete pavement between Fergusonville and Waverley was widened to 20′ and reshouldered.

0.2 Miles of 20′ concrete was laid on the diversion ½ mile south of Wyebridge.

A Salt stabilized surface was constructed from Schomberg to Holland River. 1.8 miles and from Drapers Creek Bridge North one mile.

All other gravel roads on this residency were treated either with an oil dust layer or calcium chloride.

All roads were kept open for winter traffic.

Residency No. 7—Port Hope

Road No. 7.

The sub structure for the Peterborough Locks Bridge over the Trent Canal was completed, the steel superstructure was removed from the old Welland Canal at St. Catharines, and re-erected on this site.

A single span rigid frame concrete arch was erected over the Ouse River and also a double span of the same type over the Indian River, these bridges are between Norwood and Peterborough.

One mile of Retread pavement was laid East of Marmora.

Swing Bridge over Murray Canal, Highway No. 33, near Trenton

Road No. 33.

Three Miles South of Trenton over the Murray Canal a new bridge was partially completed.

7½ Miles of Penetration Macadam were laid between Frankford and Stirling.

On this Residency considerable surface treating was done, all gravel roads were treated either with oil dust layer or calcium chloride.

All roads were kept open during the winter, using about 140 miles of snow fence.

RESIDENCY NO. 8—BROCKVILLE

Road No. 2.

A dangerous curve, one-quarter of a mile West of Prescott was flattened by day labour grading, and surfaced with loose crushed stone. A dangerous curve West of Yonge's Mills was eased.

Road No. 7.

A certain amount of day labor grading was done to remove rock-slides and washouts.

62 Miles of gravel road were treated with Calcium Chloride.

Road No. 38.

A Reinforced Concrete Bridge was built over the Canadian Pacific Railway at Sharbot Lake.

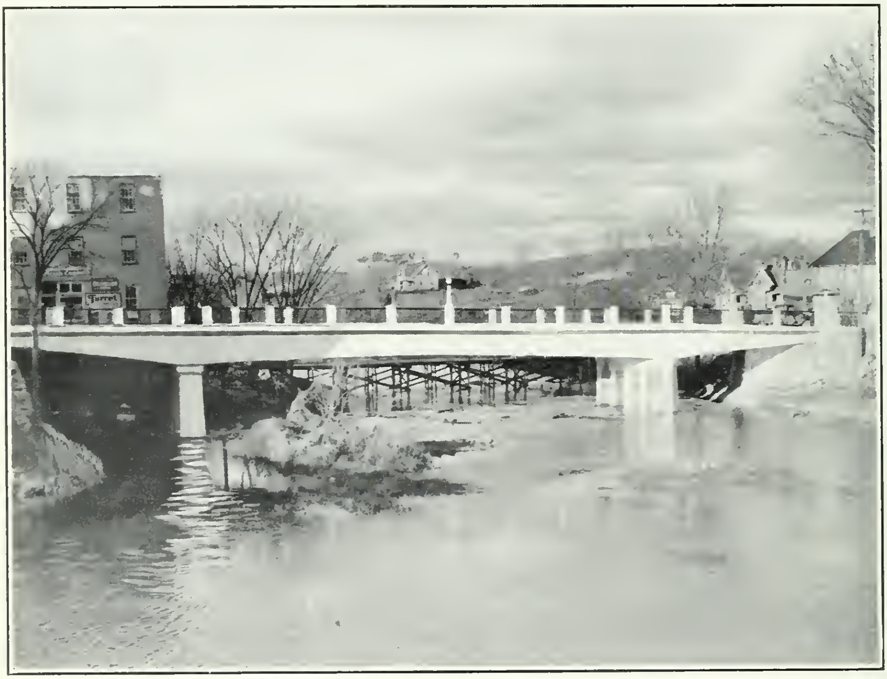
A half-mile of Bituminous Penetration was constructed between Glenvale and Murvale, and 6,000 tons of stone were crushed.

Road No. 33.

From Kingston West for a distance of eight miles the old Macadam was widened to 20 feet, the road was straightened, curves were flattened and some sharp grades reduced.

West of Bath Village a considerable tonnage of stone was crushed and stock piled.

East from Glenora Ferry three miles of Earth grading was done and two miles of Stabilized Gravel Road was built with Calcium Chloride.



Teeswater River Bridge, Bruce County, Re-inforced concrete with cantilever girders.

Road No. 41.

The grading which was started at Kaladar in 1934 was completed as far South as Erinsville. An important feature was the reduction of steep grades South of the Claire River.

Wolfe Island.

Two crushing contracts were let on the Island, this stone was mostly placed on the East and West Road and at the same time the dirt surface was scarified and reshaped.

Brockville—Westport Road.

This road was assumed August 1935 and the following sections were stabilized with Calcium Chloride, Crosby South 3.6 miles, Newboro, to Westport 3.7 miles.

0.6 Miles were stabilized using Salt North from Forfar.

On this Residency 44 miles of pavement were surface treated and the whole residency, with the exception of Wolfe Island, was kept open for winter traffic.

RESIDENCY NO. 9—OTTAWA

Road No. 2.

East of Cornwall, the existing 20 foot pavement was widened out to 30 feet, the widened portion being constructed with a six inch base of Penetration Macadam, topped with 3″ of cold laid Bituminous material.

Three miles East of Morrisburg a dangerous curve was flattened out by day labor.

Road No. 17.

East and West of Cobden for a length of 12.3 miles the 10′ concrete pavement was widened to 20 feet using washed and screened gravel concrete.

In the Town of Renfrew, a new Bridge was constructed over the Bonnechere River.

Between Renfrew and Arnprior on 10.7 miles of gravel road, two contracts were awarded for laying concrete pavement. About 6.3 miles of this section were completed, before cold weather caused cessation of the work.

East of Ottawa towards Rockland a contract was awarded for the extension of the existing culverts and also for the widening of the Right-of-way, this work was not all completed.

Between Plantagenet and Alfred and on 1.3 Miles of the connecting link in the Town of Hawkesbury a contract for crushed stone concrete pavement was awarded. There was 6.6 Miles of this contract completed.

Storm drains were constructed in the Village of Alfred by day labor.

On the Hill at Plantagenet extensive sub-drainage work was carried out.

Road No. 34.

Grading and surface stabilization was carried out for 5.5 miles between McCrimmon and Fassifern.

A modified stabilization was carried out by day labor for three miles between Fassifern and Alexandria.

Road No. 29.

From Pakenham Southerly a distance of 3.8 miles a one course Bituminous Penetration Pavement was laid.

On this Residency surface treatment was applied on Highway No. 15 between Ashton and Carleton Place and also East and West of Morrisburg on No. 2 Highway.

All the roads on the Residency were kept open for winter traffic.

BRIDGES COMPLETED ON THE KING'S HIGHWAYS 1935

Arthur Sedgwick, Bridge Engineer

During the year 1935, some ten bridges were completed on the King's Highways. These included:

Allanburg Bridge.—This is a steel bridge, 75 foot span on Highway No. 20 over the Hydro Electric Power Commissions power aqueduct and replaces an old steel bridge of 15 foot roadway and which was entirely too light for present traffic. The approximate cost was $14,500.00 exclusive of cost of grading and paving approaches.

Bowen Creek Extension.—This is an extension to a 40 foot steel bridge on the Blue Water Highway South of Sarnia to provide the standard width of 30 feet and one sidewalk.

Close up of Bridge over Indian River, 10 miles East of Peterboro

Rawden Creek Bridge.—This is a 50 foot reinforced concrete rigid frame bridge on Highway No. 33, South of Stirling, built by day labor during the fall and winter of 1934-35 as a relief measure. It replaces an old concrete arch. The cost was approximately $10,000.00.

Ouse River Bridge.—This is a 30 foot concrete rigid frame bridge replacing a narrow steel bridge on Highway No. 7, East of Peterboro.

Indian River Bridge.—This is a twin foot span rigid frame concrete bridge replacing a 90 foot steel bridge. The work included straightening and grading the road for approximately one half mile and building one 20 foot culvert. The cost amounted to approximately $13,600.00 including 10,000 cu.yds. of grading for approaches.

Sharbot Lake Overhead.—This is a reinforced concrete triple span rigid frame overhead crossing of the C.P.R. on the Kingston Sharbot Lake Highway. The railway runs through a rock cutting at this point and an additional 22 foot span was placed at each end to put the abutments on the rock embankment and thus reduce the cost. The work included building the diversion and grading at each end. The approximate cost including grading amounted to $12,500.00.

Etobicoke Bridge.—This is a twin 75 foot span reinforced concrete rigid framed rib bridge on Highway No. 2. It replaces the Bow String Arch Bridge build by the Toronto and Hamilton Highway Commission in 1917. The new bridge has a roadway 60 feet wide with two 6 foot sidewalks. The road was straightened and widened by utilizing the abandoned electric radial line to Port Credit. The work of grading the roadway was done by day labor as a relief measure. The total cost of the bridge was $31,000.00.

Black Creek Bridge No. 4.—This is a 55 foot span rigid frame structure on Highway No. 19, North of Milveston. The cost of this structure was $9,000.00.

Hamilton Entrance Bridge No. 1.—Owing to the eastern abutment of this bridge continually shifting forward from the time it was built in 1921, much expense was required to maintain the bridge. The abutment had finally shifted so badly as to damage the steel structure by crowding the same. The long wing walls were demolished down to the top of the footings and the earth fill removed from the same thereby removing the weight behind the abutment. The wing walls and earth fill were replaced by three 36 foot steel beam spans on steel bents and a new low abutment. The cost of this work amounted to $15,900.00.

BRIDGES COMPLETED ON THE KING'S HIGHWAYS DURING 1935

Name	Type	Span	Road No.	Township	County
Allanburg	Steel Truss	72′ 6″	20	Thorold	Welland
Bowen Creek Extension	Steel Beam	36′ 0″	40	Moore	Lambton
Black Creek No. 4	Concrete Rigid Frame	55′ 0″	19	Mornington	Perth
Etobicoke Creek	Concrete Rib Rigid Frame	2 at 73′ 3″	2	Etobicoke	York
Hamilton Entrance No. 1. (Repairs)	Steel Beam	3 at 36′ 0″ added to East End	2	Barton	Wentworth
Indian River	Concrete Rigid Frame	2 at 48′ 9″	7	Otonabee	Peterborough
Ouse River	Concrete Rigid Frame	30′ 0″	7	Asphodel	Peterborough
Rawdon Creek	Concrete Rigid Frame	50′ 0″	33	Sidney	Hastings
Sharbot Lake Overhead	Concrete Rigid Frame	22′ 4″—27′ 5″—22′ 4″	38	Oso	Frontenac
Toronto Twp. Extension	Concrete Beam and Slab	24′ 6″	2	Toronto	Peel

REPORT ON MUNICIPAL ROADS

Report upon the work of the Municipal Roads Branch for the year 1935

J. A. P. Marshall, Assistant Chief Engineer of Municipal Roads

COUNTY ROADS

Since the passing of The Highway Improvement Act and to the end of 1935 a total of $127,329,523.13 has been expended on construction and maintenance of county roads, of which the Province has contributed $59,904,618.74. This includes the county expenditure during 1935, on which the Provincial subsidy was paid in 1936.

At the end of 1935 the Province was paying subsidies to the counties on 8, 224 miles of county roads—approximately 15 per cent. of the total road mileage in the area covered by the County Road System.

Expenditure on county roads in 1935 was as follows:

	Total Expenditure	Provincial Subsidy
Construction		
County Roads	$1,143,800.55	$ 571,606.00
Maintenance		
County Roads	1,963,414.77	981,667.39
Total Expenditure	$3,107,215.32	$1,553,273.39

The work on which the above expenditure for construction was made, included the following:

Gravel or stone	144.67 miles	
Surface-treated gravel or stone	22.55	
Low-cost bituminous surfaces	51.09	
Mixed macadam and asphaltic concrete	10.07	
Cement concrete	2.44	
Total	230.82	
Bridges over 10-foot span		20
Steel arch and concrete culverts		58
Pipe and tile culverts		773

In addition, approximately 2,200 miles of stone and gravel roads were re-surfaced.

Construction Work

A detailed list of the work undertaken by the various counties is found further in this report grouped in districts.

Maintenance Work

Several of the counties during the past year have undertaken the laying of a low-cost bituminous surface with the endeavour to cope with high maintenance cost and to preserve local materials. A great improvement is noted in the character of surface treatment.

Stabilized roads built by calcium chloride and salt have been undertaken by Huron, Bruce, Dufferin, Ontario, Carleton, Waterloo, Haldimand.

A number of the counties have practically eliminated the use of the small patrol grader and the purchasing of power equipment has resulted in considerable savings in the cost of maintenance.

County Suburban Roads

The mileage of suburban roads is 743.8 miles, the expenditure at the end of 1935 amounted to $24,052,814.51, of which the cities and the separated towns have contributed $6,350,800.74, or five per cent. of the total expenditure made on the County Road System.

In 1935, the expenditure on county suburban roads was $646,797.83, of which the Province contributed $323,398.92 and the cities $173,916.19.

District No. 1—*Counties of Essex, Kent and Lambton.*

Essex—During the season 2.20 miles of plant-mix asphalt mulch were laid on County Road No. 5 north of Colchester, thereby completing a surfaced road between Colchester and Harrow. 2.05 Miles of a similar type were laid on County Road No. 2 in Mersea Township towards Point Pelee. Two reinforced concrete bridges were constructed of 14-foot span on county roads 3 and 9. Maintenance work was carried out to a high standard.

Kent—Grading and resurfacing were carried out on 11.25 miles. One mile of asphalt mulch was laid in the vicinity of Erieau. One concrete bridge was built in Raleigh Township of 14-foot span. Many narrow culverts and bridges were widened.

Lambton—.87 miles of asphalt mulch was laid on the Lake Road East of Sarnia. This work completes the surfacing from Sarnia East to Perch Creek. 7.75 Miles of grading was done in Sombra, Euphemia, and Bosanquet Townships.

Mention should be made here of the retirement of Mr. John McCallum as County Road Superintendent. His services will always be remembered for his splendid work and co-operation in the improvement of the Lambton County Road System.

District No. 2—*Counties of Elgin, Middlesex and Huron.*

Elgin—One 50-foot span bridge, rigid frame, re-inforced concrete, 24-foot roadway, was constructed over Kettle Creek on the Middlesex-Elgin County Line West of Belmont on County Road No. 34.

Middlesex—1.64 miles of concrete road was laid on the Hamilton Road in the London Suburban Area. This completes the concrete pavement from London to Nilestown.

Huron—38 miles of stabilized roads were constructed with salt and calcium chloride.

Maintenance work was efficiently carried out over the entire system.

District No. 3—*Counties of Norfolk, Oxford and Perth.*

Norfolk—26.45 miles of gravel roads were re-surfaced and 35.15 miles of bituminous surfaces re-treated. In the county 86.11 miles have been covered with bituminous material out of a total county road mileage of 210.5.

Oxford—Three new bridges were constructed and one mile of retread laid to a depth of three inches.

Maintenance work has been efficiently carried out over the entire system.

Perth—5.75 miles of county roads were graded and re-surfaced and 11 culverts constructed.

DISTRICT NO. 4—*Counties of Haldimand, Lincoln, and Welland.*

Haldimand—17 miles of road surface was treated with bituminous material. Alignment improvements have been made on many of the county roads. Widening and shouldering was carried out on the Moulton Station Road and York Empire Road. One reinforced concrete bridge, rigid frame type, 45-foot span, was constructed with 24-foot roadway at $3,377.00

Lincoln—Double bituminous surface treatment of 1.3 miles was undertaken and 4 reinforced concrete culverts were constructed and 4 concrete culverts extended. In addition general maintenance and repair of bituminous surfaced roads was undertaken by the county. This county is to be commended on the excellent work undertaken by their own county-owned outfit on their entire system.

Welland—General resurfacing work with bituminous materials was carried out and two 100-foot span bridges were painted. Considerable cold patching was undertaken.

DISTRICT NO. 5—*Counties of Brant, Waterloo, Wellington and Wentworth.*

Brant—One mile of plant-mix bituminous construction was laid on the Charing Cross road within the Brantford Suburban Area, and one mile of road-mix was laid on the Onondaga Road. In addition 4 miles of grading was done on various county roads.

Waterloo—The county graded 1.25 miles by contract and 8.5 miles by day labour. This work is following out a programme that includes approximately 10 miles of grading annually. One-half mile of old concrete work into Wellesley was topped with bituminous concrete. 5.9 miles of mulch and 4 miles of double surface were laid on county roads while on the Galt Suburban Area 1.4 miles of mulch was laid on the Blair-Galt Road and on the Kitchener Suburban Area 1.2 miles of retread surface was laid on the road from Rosedale to Bloomington. Two miles of stabilized road was laid.

75.5 miles of road were treated with dust-layer and 26,300 feet of new snow fence were erected and 25,716 cu.yds. of crushed gravel was placed on various roads, at an average price of 53 cents per cu. yd. delivered on the road.

Waterloo County roads, including the Suburban Roads of Kitchener and Galt are in excellent condition.

Wellington—During the season of 1935, 13.35 miles of grading were undertaken and this mileage was also surfaced with gravel. This work is a decided improvement and this procedure will be adhered to annually. One and a half miles of retread were laid in the Village of Arthur and West Luther Township.

Maintenance work was carried out with three power graders.

Wentworth—The chief items include 10 miles of regrading and road w dening, 8 miles of resurface treatment for the first time, 2 miles of stone base, 4 miles of retread and several small concrete culverts constructed on County Roads.

Early in the year a retread top was put over the La Salle Park Road, and a stone base was put down on the Mohawk Road across Lots 7 and 8, Barton Township in the Hamilton and Wentworth Suburban Area. In addition maintenance work was carried out over the entire system.

Wentworth County has a splendid road organization and the standard of work is well maintained throughout.

DISTRICT NO. 6—*Counties of Bruce and Grey.*

Bruce—The Paisley Bridge was built of reinforced concrete, consisting of one clear span of 107′0″ and two 37′ spans, with 28-foot roadway, with sidewalks, at a cost of $20,721.00. Eight miles of new grade, 30-foot shoulder to shoulder, were constructed and in addition grade reduction was carried out on three hills and several curves were eased. Four miles of retread were laid and four and a quarter surface-treated. Ten metal culverts were installed.

Maintenance work was adequately carried out over the entire system.

Grey—Elimination of several corners and flattening curves were completed, two in Keppel, two south of Hanover, two south of Neustadt, one in Collingwood Township and two at townline of Sarawak and Keppel. A retread surface was laid at Ayton. One 50-foot span reinforced concrete bridge of rigid frame type was built at Leith in the Owen Sound Suburban Area.

During the season 16,195 cu. yds. of gravel were crushed. The cost of crushing averaged 29.7 cents per cu.yd. and the average cost was 4.3 cents per cu.yd., making an average cost of gravel in the bins at 34 cents per cu.yd. The average cost of hauling was 25.2 cents per cu.yd., making a total average cost of the gravel on the road of 59.2 cents per cu.yd.

20 miles of county roads and 6.5 miles of suburban roads were treated with Calcium Chloride.

General maintenance work has been well carried out over the entire system.

DISTRICT NO. 7—*Counties of Dufferin, Halton, Peel and Simcoe.*

Dufferin—The approaches to the Canadian Pacific Railway crossing opposite Lots 9 and 10, East Garafraxa, were widened and raised, thus greatly improving driving conditions. One mile of the Hockley Road was relocated. Three bridges of reinforced concrete were constructed.

Approximately 22,667 cu.yds. of crushed gravel was placed on the county road system at an average cost of .65 cents per cu.yd. 4.75 miles of stabilized roads were laid.

Halton—The ten-foot concrete pavement on Brant Street, Nelson Township, was widened out to sixteen feet by placing a three-foot strip of cold bituminous mixture on each side of the original pavement. Four miles on County Road No. 3 was stabilized.

Throughout the year, the entire county road system was well maintained and approximately 16,087 cu.yds. of road metal were used in resurfacing the whole system. Dust-layer was applied in the villages and hamlets.

Peel—1.10 miles of bituminous gravel-mulch was laid in the villages of Caledon East, Cheltenham and at the Pinchin's Road in Toronto Township.

Approximately 7000 cu.yds. of gravel were used in resurfacing.

Simcoe—Ten miles of grading was carried out by contract. Between New Lowell and Sunnidale Corners, on County Road No. 7, the road was widened to a 30-foot top and a number of curves flattened. Six culverts were built and 10 pipe culverts were installed.

Maintenance work was carried out over the entire system.

During the year 35 miles were added to the County Road System.

DISTRICT NO. 8—*Counties of Ontario, Victoria, and York.*

Ontario—During the year 5.13 miles of grading was undertaken and resurfaced with metal. 1.37 miles of bituminous retread was laid in three localities south of Port Perry, in Goodwood Village, and in Atherly Village. 1.32 miles was also laid in the Oshawa Suburban Area on Road No. 2, Con. V, East Whitby. The Beaver Bridge between Con. VI and VII, Brock Township, at Lot 15 was built by the County in co-operation with Brock Township.

Maintenance work consisted of resurfacing 22.4 miles. Dust-layer was applied on 16.45 miles of county roads.

Victoria—Grading and gravelling was carried out on Road No. 3 for .77 miles and on Road No. 4 for 1.28 miles. Relief labour from the Town of Lindsay was used on these works. On County Road No. 8 a corner and new alignment was made in Con. I Verulam Township.

50 miles of county roads were resurfaced. Bituminous surface treatment was carried out over 7.25 miles and 10 miles of stabilization was done.

York—The important items of construction work carried out during 1935 were (1) 1.75 miles of grading, gravelling and structures on Bathurst Street from Glencairn Ave. to Wilson Ave. (2) 1.87 miles of bituminous macadam penetration was laid on Dawes Road from Sunrise Ave. to the C.P.R. bridge. (3) 0.65 miles concrete pavement was constructed on the Sutton Road at Jackson's Point. (4) 2.71 miles of grading, gravelling and structures on the Mt. Albert Road between Sharron and Holland Landing. (5) 0.65 miles of grading, gravelling and structures on the Newmarket Road between Lots 33 and 35, Con. IV, Whitchurch Township. (6) 2.84 miles of grading, gravelling and structures on County Road No. 21—Udora Road between Sutton Line and Ontario County Boundary via Pefferlaw.

In addition to the above construction work, 50 miles of gravel resurfacing was carried out and 50 miles of bituminous surface treatment and 17 miles of the system were covered with dust-layer.

DISTRICT NO. 9—*Counties of Hastings, Northumberland and Durham, Peterboro, and Prince Edward.*

Hastings—In the northern part of the county a number of road locations were improved by diversions. The application of dust-layer was applied on the most heavily travelled roads of the County Road System, as well as considerable resurfacing.

Northumberland and Durham—A 20-foot steel span bridge was erected in Darlington Township and the Gardner Bridge in Cavan Township was extended in width. Resurfacing of the retread surfaces in the Villages of Cavanville, Bethany and Pontypool was carried out. In addition 23 miles of county roads were resurfaced with crushed gravel.

Peterboro—A gravel mulch road was laid for a distance of 1.25 miles in Bridgenorth. This is an extension of the 1934 work. 3.20 miles of surface-treatment was carried out in the Peterboro Suburban Area. One new concrete bridge of 20-foot span was built.

Resurfacing was carried on throughout the system and maintained in good condition by power graders.

Prince Edward—3.8 miles of bituminous retread were constructed during the year and the resurfacing of worn-out macadam by surface treatment and patching was undertaken.

DISTRICT NO. 10—*Counties of Frontenac, Lennox and Addington, Leeds and Grenville.*

Frontenac—One mile of mixed macadam was undertaken on the Kingston Suburban portion of Road No. 6. 1½ miles of County Road No. 2 was brushed, ditched, graded and surfaced with two inches of crushed ¾″ granite as a day labour job using the county crusher. It is planned to give this metal a double bituminous surface in 1936.

Lennox and Addington—County Road No. 9 was extended 3 Miles to Coles Ferry. The grading work was undertaken by contract. Following the usual procedure, the county manufactured their own stone chips for surface treatment and in this way took care of a number of unemployed.

Leeds and Grenville—On Road No. 3 Lansdowne northerly from Lot No. 7, Con. V, the road was graded, gravelled and surfaced with stone. Road No. 9 Phillipsville to Elgin 1.1 miles of bituminous concrete was laid on the new grade. Road No. 6 Brockville to Lyn was also graded for a distance of 1.1 miles and a bituminous top constructed. On Road No. 16, the pavement from Merrickville to Burritt's Rapids was completed by the addition of one-half mile of retread.

In the Brockville Suburban Area one-half mile of grading was undertaken and in the Smiths Falls Suburban Area one mile of bituminous concrete surface was laid towards Jasper.

DISTRICT NO. 11—*Counties of Carleton, Lanark, and Renfrew.*

Carleton—Continuation of the Richmond Road widening in Westboro was undertaken and—.75 miles on the River Road was relocated in the Ottawa Suburban Area.

Maintenance work was well done within the Suburban Area and more attention has been paid to dragging on the county roads with consequent improved surface condition.

Lanark—The Beaver Dam Bridge 92-foot span was constructed and one-half mile of road relocated in the matter of approaches. The bridge over the Mississippi River near Dalhousie Lake was jacked up and levelled.

Only normal maintenance was carried out on the County Road System.

Renfrew—A contract was let for a reinforced concrete bridge at Forresters Falls but construction of this work was postponed until 1936 due to the lateness of the season. Preliminary surveys were run for a proposed new structure at Burnstown over the Bonnechere River.

Maintenance was the only activity in the county programme for 1935 with considerable interest being paid to the upkeep of hard surfaced roads.

DISTRICT NO. 12—*Counties of Prescott and Russell and Dundas, Stormont and Glengarry.*

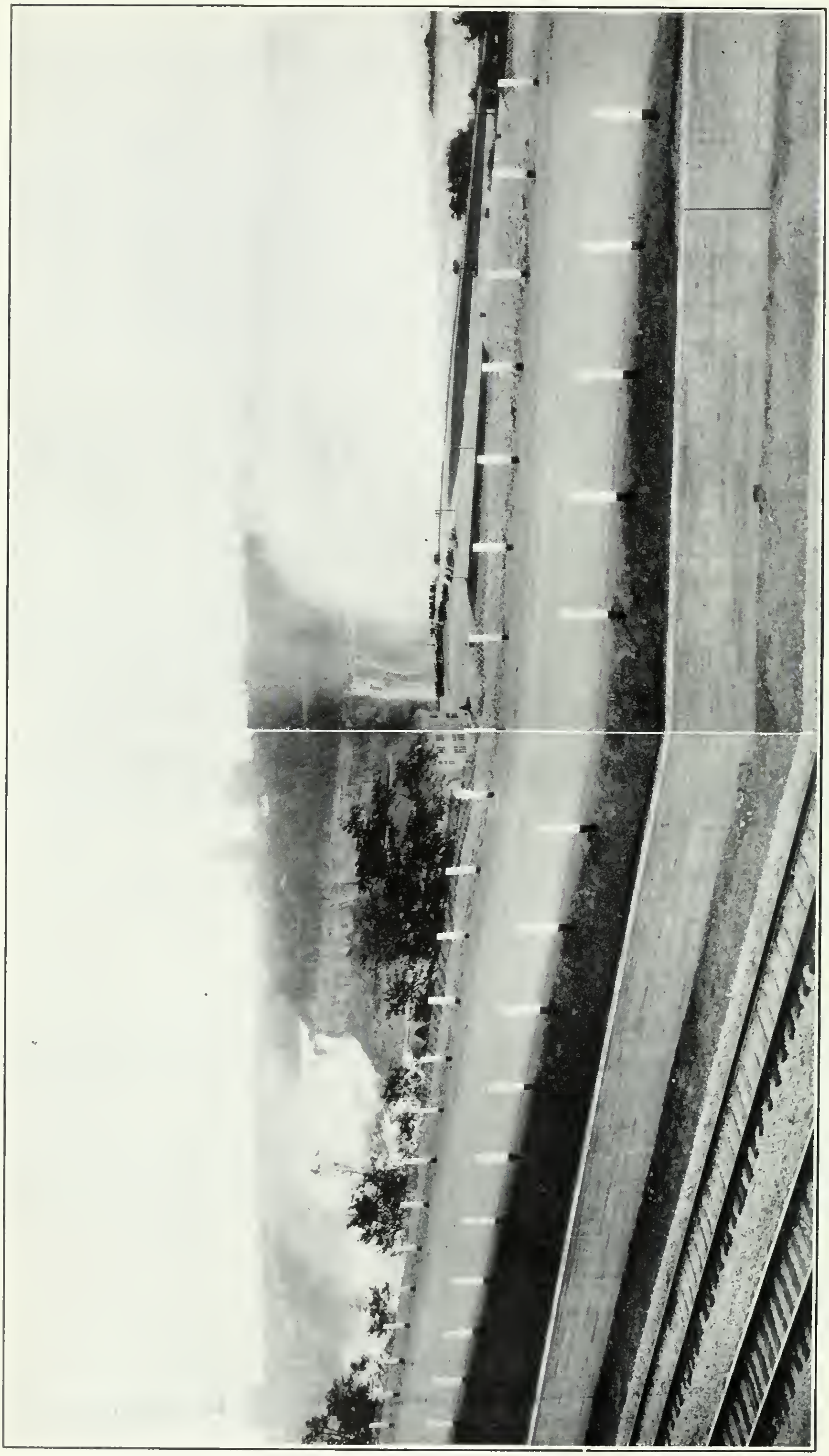
Prescott and Russell—Two miles of grading was undertaken on County Road No. 5, Cambridge-Russell Boundary and crushed stone applied for one mile. Grading was done along with the installation of culverts on Riceville Road No. 16. Extensive repairs were made to the Riceville Bridge.

Stormont, Dundas and Glengarry—The Crysler Bridge on County Road No. 13 was completed with the erection of 2—88′ steel spans and 20-foot concrete floor. Cold premix macadam was laid for a distance of 7 miles on County Roads No. 6, No. 1, No. 2, No. 8, No. 14 and No. 15. On County Road No. 15 from Cornwall northerly for a distance of one-half mile widening was done and the old road extended to an 18-foot surface.

Surface treatment with bituminous material was carried out over 45 miles of roads.

The county has a splendid maintenance organization and the results show careful supervision.

During the year 113.4 miles of roads were added to the County Road System.



FALLS VIEW DRIVE - STAMFORD TOWNSHIP

ROAD ACCOUNTING

The uniform system of keeping road accounts has now been established in every county and a great improvement is noted also in the various townships. The procedure of auditing the highway accounts of the various municipalities and the assistance given by the Department's auditors has been most favourably received and greatly appreciated by the municipal officials.

ROAD CONFERENCE

The Twenty-First Annual Road Conference was held on the 18th and 19th of February 1935 and was largely attended by the various municipal officials. This annual interchange of experiences and opinions is creating a great interest among the officials. Over two hundred were registered at this conference.

In addition the Eighth Annual District Conference was held in London in March 1935 comprising the Middlesex, Elgin and Huron District, and the Seventh Annual District Conference was held in Chatham in March 1935 comprising the Essex, Lambton and Kent District. These smaller gatherings are a valuable supplement to the large one and the friendly exchange of experiences thus made possible are believed by this Branch to be of great practical benefit to all those participating.

TOWNSHIP ROADS

The total approved expenditure in 1935 of the 339 townships receiving aid under The Highway Improvement Act amounts to $2,914,529.34. Subsidies amounting to $1,219,153.18 were paid through the Highway Department.

The township work for 1935 consisted chiefly of resurfacing, dragging and mainly expenditure of general maintenance. Mention should be made of the work carried out in Stamford Township on the Falls View Drive under the supervision of Mr. M. F. Kerr. This is the largest single item of construction work, involving an expenditure of $137,073.18, and the improvement made in this locality, affording as it does a magnificent view of Niagara Falls, and eliminating two railway crossings, reflects credit to all those responsible for this important undertaking. Pictures of this work appear on pages 34 and 37.

The following shows the growth of provincial aid to townships on road improvement under the provisions of The Highway Improvement Act:

1916	$ 1,241.71	towards Supt's salary
1917	1,608.72	" "
1918	1,910.59	" "
1919	2,620.00	" "
1920 (184 townships)	340,973.38	commencement of aid
1921 (294 ")	708,486.91	on improvement.
1922 (312 ")	649,601.47	
1923 (315 ")	614,037.88	
1924 (320 ")	638,940.11	
1925 (272 ")	988,633.29	
1926 (295 ")	1,317,146.17	
1927 (307 ")	1,619,169.74	
1928 (324 ")	1,802,640.64	
1929 (337 ")	2,105,741.41	
1930 (342 ")	2,451,334.10	
1931 (344 ")	1,805,658.51	
1932 (343 ")	1,315,025.55	
1933 (338 ")	988,342.09	
1934 (338 ")	1,229,523.31	
1935 (339 ")	1,221,706.95	
	$19,796,961.51	

NEW FEATURES

The Department publishes, as a matter of interest, a summary of road surfaces existing on county and township roads at the end of 1935, under county headings. This year we have divided the usual county summary of work and expenditure so as to provide a schedule showing on the one side the work done on county roads during the year, and on the other, the work done on township roads during the year. The expenditure, which this work represents, appears separately.

This Branch has for some years paid special attention to the amounts raised by counties and townships for road purposes, and schedules have been provided showing SUMMARY OF COUNTY AND TOWNSHIP LEVIES—1935, and SUMMARY OF 1935 COUNTY LEVIES ON BASIS OF EQUALIZED ASSESSMENT.

This information is made possible through the kindly co-operation of the municipal clerks and treasurers of the Province and the Department desires to thank these officials for the help they have given us in this and many other matters.

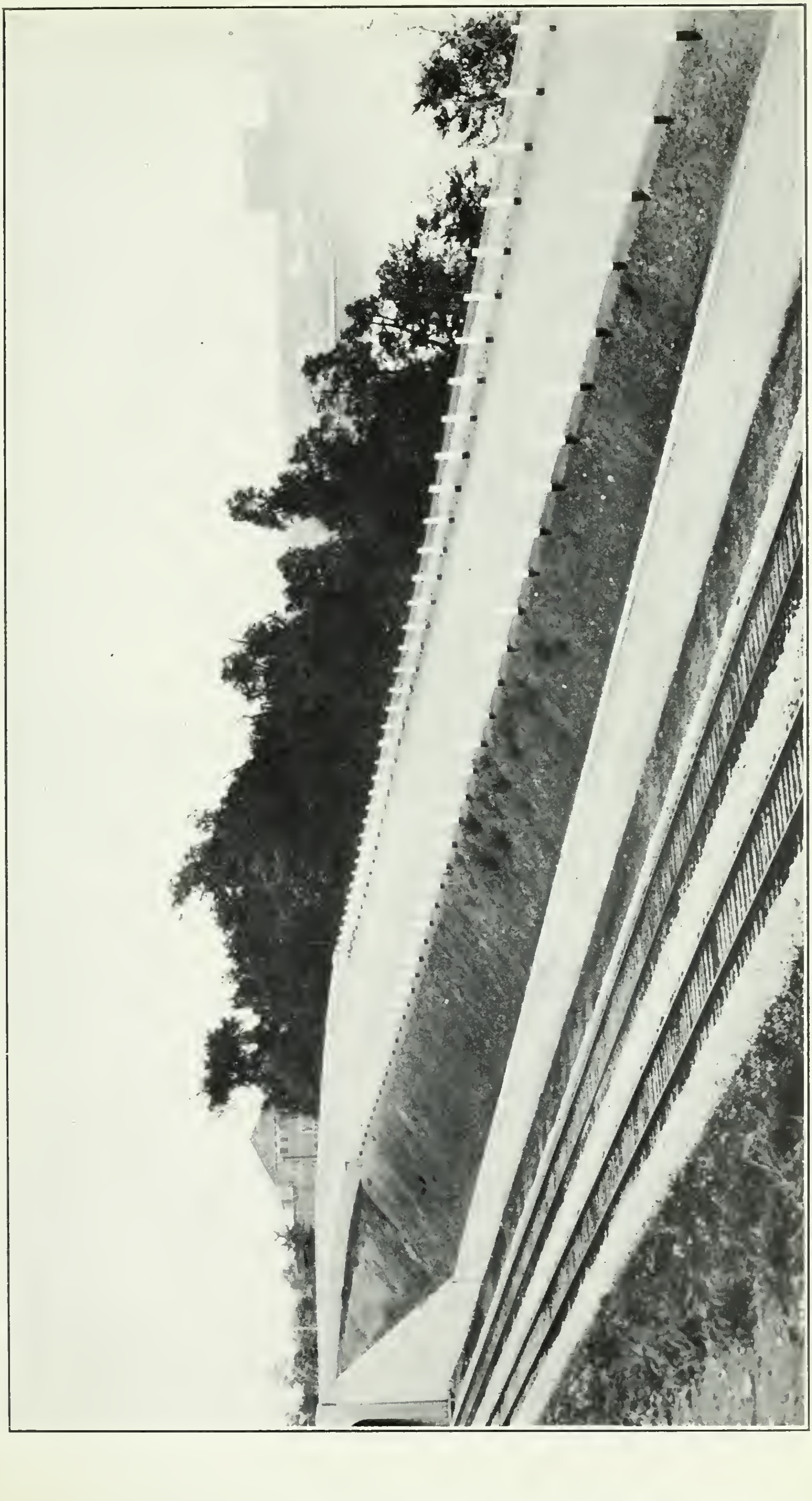
INDIAN RESERVES

During the year 1935, the expenditure made on Indian Reserves was $29,-098.73 on which the Department subsidy amounted to $13,891.84. Thirteen Indian Reserves are participating in Departmental assistance under the Highway Improvement Act.

Indian Reserve	Expenditure
Alnwick	460.97
Cape Crocker	3,966.50
Caradoc	837.16
Kettle and Stony Point	169.06
Moravian	284.90
Mud Lake	139.60
New Credit	1,500.00
Rice Lake	99.77
Sarnia	145.20
Saugeen	696.80
Six Nations	17,757.65
Tyendinaga	2,201.53
Walpole Island	839.59
Total	$29,098.73

CONCLUSION

The county engineers and superintendents of the various counties and suburban commissions along with the township road superintendents are making a great contribution to the improvement of rural roads throughout Ontario and this Department acknowledges with appreciation the wholehearted co-operation of these officials in this splendid work for the welfare of the people of Ontario.



FALLS VIEW GRADE SEPARATION - STAMFORD TWP.
Overhead crossing and north end of new gradient, looking east and across the Niagara River.

APPENDICES

Nos. 1 to 12

APPENDIX

DETAILS OF CONSTRUCTION—

County	Bit. Mixed Method	Culverts and Extentions Built		Bridges and Subways	Miles of Grading and Shoulders	Miles of Gravelling
		Culverts Built	Extensions			
Brant						6.00
Bruce						51.2
Carleton			23			
Dufferin		2 C.I.P.				7.7
Elgin		2				12.2
Essex	1.53	1	1		.53	7.1
Frontenac			86	1 B	1.00	
Grey	3.57	2 C.I.P.				41.8
Haldimand						
Halton		1	20		2.21	
Hastings	1.1	4 C.I.P.	3		7.5	
Huron		5			8.41	20.00
Kent	.16	6			3.18	15.13
Lambton				2	.65	61.42
Lanark			1			
Leeds and Grenville					10.5	10.00
Lennox and Addington		3	131		10.00	2.00
Lincoln			1	1	.36	
Middlesex						22.00
Norfolk						
Northumberland and Durham						
Ontario			13		4.1	
Oxford						4.3
Peel		21	21		7.15	2.25
Perth		1	3 5 C.I.P.	2	.6	45.00
Peterboro		2		1		12.00
Prescott and Russell			34		.2	
Prince Edward						
Renfrew				1		
Simcoe		45		1 B 1 S	11.1	7.88
Stormont, Dundas and Glengarry	3.5	10	15			8.64
Victoria						14.00
Waterloo	.35		1			
Welland	.13					
Wellington			1			
Wentworth			1	1 EXT.	.15	
York		37	7		8.8	.45

No. 1

KING'S HIGHWAYS, 1935

Miles of Traffic Bound Macadam	Miles of Bitumen Pene-tration	Miles of Asphaltic Concrete	Miles of Concrete Pavement	Lin. Ft. of Guard Rail	Lin. Ft. Storm Sewers and Tiling	Miles of Surface Treat-ment	Miles of Gravel Road Maint.	Miles of New Fence Erected
....	....	....	....	4,500	....	1.2	....	....
....	....	....	1.00	2,194	1,000	....	19.2	....
.2	....	....	....	8,530	280	....	....	.85
....	....	....	....	226	2,400	....	....	.25
....	....	....	....	....	42,849	....	....	1.33
....	....	....	....	....	....	3.75	7.10	.7
10.00	8.6	....	....	600	3,000	70.2	....	9.00
....	....	....	....	1,070	3,000	9.05	....	.05
....	....	....	....	....	....	25.23	....	1.04
....	....	1.00	....	....	264	....	2.7	5.10
24.00	7.00	....	....	9,000	16,360	13.3	63.79	1.5
....	....	....	....	2,500	....	2.5	61.25	8.5
....	....	....	....	....	34,800	9.10	15.13	4.4
....	....	....	....	....	42,100	....	61.42	2.5
....	3.31	....	....	5,362	330	39.9	6.3	.29
....	....	....	....	398	....	42.2	11.5	1.00
24.00	....	....	....	3,500	....	27.6	....	12.5
....	.16	....	....	....	....	3.08	....	2.41
....	....	....	....	....	300	5.3	10.2	1.25
....	....	....	....	....	1,500	17.6	....	.4
....	....	....	....	....	....	....	27.23	....
....	....		4M-20w	....	....	....	....	....
....	....		1M-2-10w	....	3,960	....	32.5	....
	Re-Sfce 1.8					8.1		9.3
.25	....	3.2	2.33	1,600	12,475	....	5.3	7.3
....	....	....	....	4,000	1,000	1.00	37.53	2.5
....	....	....	....	....	....	....	48.75	....
....	....	....	6.3	1,353	8,280	....	9.03	.37
....	....		{ 6M-20w	....	....	11.2	....	....
....	....		10M3-10w	10,148	993	....	....	....
....	....	....	....	....	....	....	....	....
6.5	....	....	3.00	10,500	1,750	1.75	93.3	18.23
....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....
....	....	....	....	2,970	3,014	9.3	6.1	.25
....	....	....	....	....	....	....	22.65	....
....	....	....	....	5,000	4,000	....	....	.1
....	....	....	....	....	528	....	....	....
....	....	....	....	1,475	....	....	....	2.00
....	....	....	....	2,500	9,082	21.66	....	6.44
6.35	1.1	.55	.87	1,900	4,624	5.7	6.5	10.65

APPENDIX No. 2

EXPENDITURE BY COUNTIES

April 1, 1935 to March 31, 1936

County	Construction	Maintenance	Total
BRANT			
Highway No. 2	$ 3,126.55	$ 11,454.98	$ 14,581.53
" No. 5	5,173.22	3,683.31	8,856.53
" No. 24	6,241.46	6,482.86	12,724.32
" No. 24A	580.62	1,831.20	2,411.82
Burford Road	7,345.09	4,978.59	12,323.68
Total	22,466.94	28,430.94	50,897.88
BRUCE			
Highway No. 4	4,829.08	7,744.86	12,573.94
" No. 9	32,809.34	13,575.26	46,384.60
" No. 21	24,775.35	18,651.60	43,426.95
Total	62,413.77	39,971.72	102,385.49
CARLETON			
Highway No. 15	1,137.92	5,899.81	7,037.73
" No. 16	2,837.01	8,989.37	11,826.38
" No. 17	17,794.74	12,077.26	29,872.00
" No. 29	650.16	1,355.94	2,006.10
Total	22,419.83	28,322.38	50,742.21
DUFFERIN			
Highway No. 9	3,914.61	6,857.69	10,772.30
" No. 10	1,096.18	8,695.70	9,791.88
Total	5,010.79	15,553.39	20,564.18
ELGIN			
Highway No. 3	32,529.50	20,922.54	53,452.04
" No. 4	767.96	5,002.90	5,770.86
" No. 19	44,003.86	5,065.02	49,068.88
Total	77,301.32	30,990.46	108,291.78
ESSEX			
Highway No. 2	3,281.55	6,945.68	10,227.23
" No. 2A	3,252.05	10,526.17	13,778.22
" No. 3	22,243.79	9,898.13	32,141.92
" No. 3B	249.05	3,816.39	4,065.44
" No. 18	28,805.76	10,235.94	39,041.70
" No. 39	6,002.95	5,789.97	11,792.92
Total	63,835.15	47,212.28	111,047.43
FRONTENAC			
Highway No. 2	2,071.21	7,890.54	9,961.75
" No. 7	5,622.35	9,054.16	14,676.51
" No. 15	1,456.82	13,209.14	14,665.96
" No. 33	35,055.44	1,119.95	36,175.39
" No. 38	73,668.41	9,980.29	83,648.70
Wolfe Island	30,756.87	1,205.08	31,961.95
Total	148,631.10	42,459.16	191,090.26
GREY			
Highway No. 4	11,074.46	11,383.01	22,457.47
" No. 6	53,914.54	16,585.50	70,500.04
" No. 10	14,386.50	13,339.00	27,725.50
" No. 21	3,587.11	5,112.98	8,700.09
" No. 26	9,800.73	10,272.79	20,073.52
Total	92,763.34	56,693.28	149,456.62

County	Construction	Maintenance	Total
HALDIMAND:			
Highway No. 3	$ 7,456.42	$ 17,332.01	$ 24,788.43
" No. 6	3,391.41	14,820.25	18,211.66
Darkie Side Road	494.66	2,378.31	2,872.97
Total	11,342.49	34,530.57	45,873.06
HALTON:			
Highway No. 2	28,316.06	7,831.12	36,147.18
" No. 5	844.05	9,798.66	10,642.71
" No. 7	120.74	6,180.49	6,301.23
" No. 25	58,779.40	5,142.37	63,921.77
Queen St	23,280.61	3,243.45	26,524.06
Total	111,340.86	32,196.09	143,536.95
HASTINGS:			
Highway No. 2	587.91	9,986.59	10,574.50
" No. 7	35,807.82	14,497.47	50,305.29
" No. 14	16,134.13	15,289.18	31,423.31
" No. 33	113,117.67	3,523.87	116,641.54
" No. 37	28,367.53	20,195.97	48,563.50
Total	194,015.06	63,493.08	257.508.14
HURON:			
Highway No. 4	26,019.66	20,838.29	46,857.95
" No. 8	791.61	6,103.79	6,895.40
" No. 21	23,691.23	29,917.31	53,608.54
" No. 23	1,649.57	1,165.73	2,815.30
Total	52,152.07	58,025.12	110,177.19
KENT:			
Highway No. 2	33,339.54	15,232.16	48,571.70
" No. 3	7,729.42	9,147.57	16,876.99
" No. 21	6,750.10	8,570.58	15,320.68
" No. 40	16,927.97	6,166.80	23,094.77
Total	64,747.03	39,117.11	103,864.14
LAMBTON:			
Highway No. 7	11,397.22	13,667.62	25,064.84
" No. 21	36,681.74	13,243.68	49,925.42
" No. 21A	4,926.03	2,219.39	7,145.42
" No. 22	262.69	2,730.34	2,993.03
" No. 40	145,930.77	11,665.33	157,596.10
Total	199,198.45	43,526.36	242,724.81
LANARK:			
Highway No. 7	24,597.08	4,723.78	29,320.86
" No. 15	3,098.56	22,923.99	26,022.55
" No. 29	52,971.61	6,165.59	59,137.20
Franktown Road	1,181.66	....	1,181.66
Total	81,848.91	33,813.36	115,662.27
LEEDS AND GRENVILLE:			
Highway No. 2	6,151.35	19,872.37	26,023.72
" No. 15	20,904.34	17,544.33	38,448.67
" No. 16	901.26	9,409.57	10,310.83
" No. 29	12,010.78	13,286.68	25,297.46
" No. 32	1,369.51	5,980.68	7,350.19
Forthton—Westport	51,834.08	2,980.95	54,815.03
Total	93,171.32	69,074.58	162.245.90

County	Construction	Maintenance	Total
Lennox and Addington:			
Highway No. 2	$ 2,196.05	$ 5,826.53	$ 8,022.58
" No. 7	3,541.30	2,021.44	5,562.74
" No. 33	106,010.82	5,721.47	111,732.29
" No. 41	254,218.65	5,949.83	260,168.48
Total	365,966.82	19,519.27	385,486.09
Lincoln:			
Highway No. 8	52,479.35	14,403.20	66,882.55
" No. 8A	33.96	919.62	953.58
" No. 20	5,273.68	6,981.36	12,255.04
Bismark—Wellandport	1,356.47	4,830.87	6,187.34
Total	59,143.46	27,135.05	86,278.51
Middlesex:			
Highway No. 2	3,821.29	25,117.00	28,938.29
" No. 4	3,756.02	17,371.21	21,127.23
" No. 7	2,426.62	20,307.60	22,734.22
" No. 22	1,096.80	7,593.66	8,690.46
" No. 23	2,661.66	1,920.02	4,581.68
Total	13,762.39	72,309.49	86,071.88
Norfolk:			
Highway No. 3	4,877.64	14,447.04	19,324.68
" No. 6	1,329.37	4,416.27	5,745.64
" No. 19	742.77	2,567.31	3,310.08
" No. 24	1,587.33	2,966.27	4,553.60
Total	8,537.11	24,396.89	32,934.00
Northumberland and Durham:			
Highway No. 2	4,746.78	30,731.18	35,477.96
" No. 28	380.68	3,819.69	4,200.37
" No. 30	29,399.62	15,733.89	45,133.51
" No. 33	23,327.26	1,700.12	25,027.38
Total	57,854.34	51,984.88	109,839.22
Ontario:			
Highway No. 2	1,023.68	13,577.64	14,601.32
" No. 7	1,155.20	5,509.00	6,664.20
" No. 12	19,669.11	30,287.71	49,956.82
Total	21,847.99	49,374.35	71,222.34
Oxford:			
Highway No. 2	11,142.77	9,743.73	20,886.50
" No. 3	216.84	617.90	834.74
" No. 19	5,459.46	19.137.85	24,597.31
Burford Road	3,349.07	2,077.11	5,426.18
Total	20,168.14	31,576.59	51,744.73
Peel:			
Highway No. 2	98,746.57	7,038.40	105,784.97
" No. 5	6,231.83	9,213.44	15,445.27
" No. 7	6,841.75	4,958.98	11,800.73
" No. 10	13,518.13	12,498.77	26,016.90
Queen St	51,783.17	7,539.53	59,322.70
Total	177,121.45	41,249.12	218,370.57
Perth:			
Highway No. 7	2,286.59	6,543.79	8,830.38
" No. 8	6,305.84	11,153.34	17,459.18
" No. 19	30,435.64	9,270.93	39,706.57
" No. 23	8,560.75	16,543.46	25,104.21
Total	47,588.82	43,511.52	91,100.34

County	Construction	Maintenance	Total
PETERBORO:			
Highway No. 7	$ 130,786.00	$ 22,558.05	$ 153,344.05
“ No. 28	12,992.98	8,113.36	21,106.34
“ No. 30	5,543.60	1,023.75	6,567.35
Total	149,322.58	31,695.16	181,017.74
PRESCOTT AND RUSSELL:			
Highway No. 17	221,976.85	18,433.61	240,410.46
“ No. 34	1,529.97	4,872.93	6,402.90
Total	223,506.82	23,306.54	246,813.36
PRINCE EDWARD:			
Highway No. 14	7,792.19	7,331.46	15,123.65
“ No. 33	15,153.58	18,975.19	34,128.77
Total	22,945.77	26,306.65	49,252.42
RENFREW:			
Highway No. 17	307,309.22	21,853.70	329,162.92
“ No. 29	56.54	124.73	181.27
Total	307,365.76	21,978.43	329,344.19
SIMCOE:			
Highway No. 9	9,359.97	8,093.01	17,452.98
“ No. 11	23,726.12	18,552.14	42,278.26
“ No. 12	30,944.53	23,149.22	54,093.75
“ No. 26	11,660.23	11,953.76	23,613.99
“ No. 27	226,214.88	26,796.83	253,011.71
Total	301,905.73	88,544.96	390,450.69
STORMONT, DUNDAS AND GLENGARRY:			
Highway No. 2	12,541.44	22,541.56	35,083.00
“ No. 31	10,251.28	5,379.59	15,630.87
“ No. 34	45,304.95	13,490.27	58,795.22
Total	68,097.67	41,411.42	109,509.09
VICTORIA:			
Highway No. 7	3,084.26	6,687.74	9,772.00
“ No. 35	14,407.96	9,411.89	23,819.85
“ No. 36	21,217.53	6,347.30	27,564.83
Total	38,709.75	22,446.93	61,156.68
WATERLOO:			
Highway No. 7	275.32	2,717.84	2,993.16
“ No. 8	24,503.00	11,586.42	36,089.42
“ No. 24	2,010.14	3,124.11	5,134.25
“ No. 24A	580.56	2,032.31	2,612.87
Elmira Rd	2,141.11	4,322.50	6,463.61
Total	29,510.13	23,783.18	53,293.31
WELLAND:			
Highway No. 3	2,327.18	10,327.53	12,654.71
“ No. 3A	802.46	5,039.32	5,841.78
“ No. 8	1,949.39	1,532.06	3,481.45
“ No. 20	**Cr. 445.53**	**6,051.88**	**5,606.35**
Canal Road	279.88	1,152.08	1,431.96
Dominion Rd	3,427.92	1,438.12	4,866.04
Thorold S. to No. 20	1,573.56	759.02	2,332.58
Total	9,914.86	26,300.01	36,214.87

County	Construction	Maintenance	Total
WELLINGTON:			
Highway No. 6	$ 5,098.93	$ 30,133.31	$ 35,232.24
" No. 7	326.94	6,057.41	6,384.35
" No. 9	2,925.19	7,575.79	10,500.98
" No. 23	312.79	941.48	1,254.27
" No. 24	266.63	1,645.79	1,912.42
Total	8,930.48	46,353.78	55,284.26
WENTWORTH:			
Highway No. 2	59,562.55	14,345.48	73,908.03
" No. 5	3,403.33	12,943.33	16,346.66
" No. 6	5,402.03	19,419.81	24,821.84
" No. 8	15,854.72	11,498.87	27,353.59
" No. 20	3,144.24	10,758.76	13,903.00
" No. 20A	9,630.30	3,048.32	12,678.62
" No. 25	....	147.40	147.40
Darkie Side Rd	2,688.97	1,390.60	4,079.57
Gage Ave	28.76	861.88	890.64
Windermere Cut Off	77.41	363.23	440.64
Total	99,792.31	74,777.68	174,569.99
YORK:			
Highway No. 2	64,432.38	13,317.84	77,750.22
" No. 5	1,273.29	4,524.66	5,797.95
" No. 7	4,269.90	11,330.87	15,600.77
" No. 11	52,194.01	19,849.89	72,043.90
Queen St	1,735.65	4,298.09	6,033.74
Total	123,905.23	53,321.35	177,226.58
TOWN OF OAKVILLE:			
Highway No. 2	7.80	456.44	464.24
TOWN OF BURLINGTON:			
Highway No. 2	870.23	519.09	1,389.32
TYENDINAGA INDIAN RESERVE:			
Highway No. 2	90.37	4,281.21	4,371.58
PRELIMINARY SURVEY RES. NO. 3	251.81	....	251.81
Total	$3,459,776.25	$1,509,949.87	$4,969,726.12

APPENDIX No. 3

EXPENDITURES BY ROADS

April 1, 1935, to March 31, 1936

Highway No.		Mileage	Construction	Maintenance	Total
2	Windsor—Quebec Boundary	541.1	$ 336,056.08	$ 226,709.54	$ 562,765.62
2A	Windsor—Tilbury	28.7	3,252.05	10,526.17	13,778.22
3	Windsor—Fort Erie	260	77,380.79	82,692.72	160,073.51
3A	Dunnville—Niagara Falls	38	802.46	5,039.32	5,841.78
3B	Windsor to Highway No. 3	5.33	249.05	3,816.39	4,065.44
4	Port Stanley—Flesherton	155.5	46,447.18	62,340.27	108,787.45
5	Toronto—Paris	61.4	16,925.72	40,163.40	57,089.12
6	Port Dover—Hamilton Owen Sound	149.6	69,136.28	85,375.14	154,511.42
7	Sarnia—Ottawa	465	232,539.09	136,816.24	369,355.33
8	Niagara Falls—Goderich	155.7	101,883.91	56,277.68	158,161.59
8A	St. David's—Queenston	2.96	33.96	919.62	953.58
9	Cookstown—Kincardine	124.7	49,009.11	36,101.75	85,110.86
10	Port Credit—Owen Sound	105	29,000.81	34,533.47	63,534.28
11	Toronto—Severn	95.8	75,920.13	38,402.03	114,322.16
12	Whitby—Midland	97.7	50,613.64	53,436.93	104,050.57
14	Picton—Marmora	51.4	23,926.32	22,620.64	46,546.96
15	Ottawa—Kingston	131	26,597.64	59,577.27	86,174.91
16	Ottawa—Prescott	62.3	3,738.27	18,398.94	22,137.21
17	Point Fortune—Pembroke	172.6	547,080.81	52,364.57	599,445.38
18	Leamington—Windsor	49	28,805.76	10,235.94	39,041.70
19	Port Burwell—Trallee	92.2	80,641.73	36,041.11	116,682.84
20	Niagara Falls—Burlington	53.3	7,972.39	23,792.00	31,764.39
20A	Duff's Corners Hy. 2—Highway No. 20	13.02	9,630.30	3,048.32	12,678.62
21	Morpeth—Owen Sound	211.8	95,485.53	75,496.15	170,981.68
21A	Highway No. 7 to Forest	7.8	4,926.03	2,219.39	7,145.42
22	London—Sarnia	66.8	1,359.49	10,324.00	11,683.49
23	London—Arthur	86.3	13,184.77	20,570.69	33,755.46
24	Guelph—Simcoe	54.9	10,105.56	14,219.03	24,324.59
24A	Paris—Galt	13.1	1,161.18	3,863.51	5,024.69
25	Burlington—Milton	14.37	58,779.40	5,289.77	64,069.17
26	Barrie—Owen Sound	74.6	21,460.96	22,226.55	43,687.51
27	Schomberg—Midland—Penetanguishene	62.1	226,214.88	26,796.83	253,011.71
28	Port Hope—Burleigh Falls	49.9	13,373.66	11,933.05	25,306.71
29	Brockville—Arnprior	93.2	65,689.09	20,932.94	86,622.03
30	Brighton—Havelock	32	34,943.22	16,757.64	51,700.86
31	Morrisburg—Ottawa to Dundas County Line	23.9	10,251.28	5,379.59	15,630.87
32	Gananoque—Smith's Falls	47.9	1,369.51	5,980.68	7,350.19
33	Stirling—Kingston	86.2	292,664.77	31,040.60	323,705.37
34	Lancaster—Hawkesbury	38.1	46,834.92	18,363.20	65,198.12
35	Lindsay—Rosedale	22.1	14,407.96	9,411.89	23,819.85
36	Lindsay—Bobcaygeon	23.1	21,217.53	6,347.30	27,564.83
37	Belleville—Actinolite	29.3	28,367.53	20,195.97	48,563.50
38	Kingston—Sharbot Lake	47.1	73,668.41	9,980.29	83,648.70
39	Windsor—Belle River	27.2	6,002.95	5,789.97	11,792.92
40	Sarnia—Chatham	50.1	162,858.74	17,832.13	180,690.87
41	Napanee—Kaladar	38.1	254,218.65	5,949.83	260,168.48
42	Queen Street	16.86	76,799.43	15,081.07	91,880.50
43	Gage Ave., Hamilton, South to Highway No. 20	3.16	28.76	861.88	890.64
44	Windermere Cut off Hamilton N. E. to Highway No. 20	1.36	77.41	363.23	440.64
45	Darkie Side Road Elfride South to Highway No. 3	15.12	3,183.63	3,768.91	6,952.54
46	Bismark—Wellandport	3.08	1,356.47	4,830.87	6,187.34
47	Canal Road, Humberstone—Welland	5	279.88	1,152.08	1,431.96
	Forward		$3,357,915.08	$1,492,188.50	$4,850,103.58

Highway No.		Mileage	Construction	Maintenance	Total
	Brought Forward		$3,357,915.08	$1,492,188.50	$4,850,103.58
48	Dominion Road, Ridgeway—Fort Erie	6.77	3,427.92	1,438.12	4,866.04
49	Thorold South to Highway No. 20	2.39	1,573.56	759.02	2,332.58
50	Burford Road	26.9	10,694.16	7,055.70	17,749.86
51	Waterloo—Elmira	8.6	2,141.11	4,322.50	6,463.61
52	Wolfe Island	28	30,756.87	1,205.08	31,961.95
53	Forthton—Westport	......	51,834.08	2,980.95	54,815.03
54	Franktown Road Preliminary Survey	......	1,181.66	....	1,181.66
			$3,459,524.44	$1,509,949.87	$4,969,474.31
	Preliminary Survey, Stratford		251.81	....	251.81
			$3,459,776.25	$1,509,949.87	$4,969,726.12

APPENDIX No. 4

SCHEDULE OF ASSUMPTIONS AND REVERSIONS OF SECTIONS OF THE KING'S HIGHWAY SYSTEM FOR THE YEAR 1935

During the year the system was extended by assuming 189.53 miles, less 6.65 miles reverted, making a total assumed of 3,596.41 miles. A list of the roads added to the system, together with the mileage and date of designation, also list of roads and mileage reverted from the system, is as follows:—

The King's Highways Assumed in 1935

County	Date of Designation	Municipality	Mileage	Total Mileage
Brant	14th August 1935	Brantford Township	6.80	
		Burford Township	9.70	16.50
Bruce	15th May, 1935	Amabel Township	6.47	
		Arran Township	4.24	
		Bruce Township	9.27	
		Huron Township	8.87	
		Kincardine Township	6.70	
		Saugeen Township	8.08	
		Port-Elgin Village	1.90	
		Tiverton Village	1.35	
		Kincardine Town	0.42	
		Southampton Town	0.76	48.06
Elgin	26th June 1935	Bayham Township	0.85	0.85
Frontenac	22nd May, 1935	Wolfe Island Township	20.00	20.00
Grey	15th May, 1935	Derby Township	8.53	8.53
Halton	4th September 1935	Nelson Township	1.38	1.38
Hastings	26th June 1935	Stirling Village	2.45	2.45
Huron	15th May, 1935	Ashfield Township	14.99	
		Colvorne Township	6.87	21.86
Kent	1st May, 1935	Raleigh Township	0.40	
	13th November, 1935	Tilbury Town	0.90	1.30
Lennox and Addington	1st May, 1935	Camden Township	4.08	
		Kaladar Township	4.50	
		Richmond Township	9.05	
		Sheffield Township	13.02	30.65
Leeds	31st July, 1935	Bastard Township	9.40	
		Crosby S. Township	4.05	
		Crosby N. "	4.05	
		Elizabeth Township	0.95	
		Landsdowne Township	4.60	
		Yonge Township	7.65	
		Athens Village	0.75	
		Newboro Village	0.50	
		Westport Village	0.40	32.35
Oxford	14th August, 1935	Oxford E. Township	4.26	4.26
Perth	6th November, 1935	Milverton Village	0.84	0.84
Welland	4th September, 1935	Crowland Township	0.50	0.50
				189.53

Reversions From January 1st, 1935 to December 31st, 1935

County	Municipality	Year	Mileage	Total Mileage
Lambton	Sarnia Township	1935	0.56	
	Sombra Township	1935	0.67	
	Sombra Township	1935	0.84	
	Sombra Township	1935	1.71	
	Moore Township	1935	0.74	4.52
Leeds	Leeds Township	1935	0.16	0.16
Peterborough	Smith Township	1935	0.15	0.15
Simcoe	Tay Township	1935	1.34	1.34
Victoria	Ops Township	1935	0.27	
	Ops Township	1935	0.21	0.48
				6.65

APPENDIX No. 5

GROWTH OF COUNTY ROAD EXPENDITURES AND PROVINCIAL GRANTS

Year work was done	Number of Counties	Expenditure	Government Grant
1903	4	$ 166,149 06	$ 55,383 02
1904	7	291,084 42	97,028 48
1905	7	179,593 62	59,864 53
1906	10	247,102 37	82,367 45
1907	14	383,518 86	127,839 62
1908	15	429,393 57	143,131 16
1909	16	440,374 08	146,791 36
1910	17	553,312 61	184,437 54
1911	19	712,072 52	237,357 50
1912	20	898,631 18	299,543 69
1913	20	847,684 15	282,561 35
1914	20	785,521 93	261,840 61
1915	20	811,540 05	270,513 34
1916	23	955,447 19	327,663 76
1917	32	1,388,341 87	483,621 32
1918	36	2,226,899 70	815,440 01
1919	37	5,714,937 19	2,623,719 24
1920	..	7,956,863 72	3,626,418 08
1921	..	11,078,288 39	5,119,882 26
1922	..	9,162,491 79	4,258.339 83
1923	..	7,403,509 96	3,418,523 07
1924	..	6,861,451 62	3,214,321 50
1925	..	6,608,431 04	3,222,678 10
1926	..	5,838,445 12	2,913,660 96
1927	..	7,424,464 85	3,706,719 88
1928	..	8,784,420 42	4,360,222 86
1929	..	9,212,758 04	4,591,110 16
1930	..	8,929,424 27	4,463,527 11
1931	..	7,265,350 65	3,625,860 66
1932	..	4,214,410 70	2,106,457 18
1933	..	3,058,622 91	1,529,228 37
1934	..	3,391,768 96	1,695,291 35
1935		3,107,215 32	1,553,273 39
Totals to date		$127,329,523 13	$59,904,618 74

APPENDIX No. 6

COUNTY ROAD MILEAGE AND EXPENDITURE

From Inception of County Road Systems to December 31st, 1935, Provincial Subsidies on 1935 Expenditure Being Paid in 1936.

County	Year of Establishment of System	Road Mileages			Total Approved Expenditure to end of 1935	Total Government Grant
		County Roads	County Suburban Roads	Total		
		Miles	Miles	Miles	$ c	$ c
Brant	1917	67.6	24.7	92.3	2,362,968.57	1,173,250.14
Bruce	1917	259.2	.....	259.2	3,149,742.96	1,564,850.74
Carleton	1909	153.2	104.8	258.0	6,649,755.81	3,117,800.21
Dufferin	1918	143.7	.....	143.7	1,347,659.91	636,862.88
Elgin	1917	226.8	14.3	241.1	2,417,805.64	1,133,188.45
Essex	1916	211.8	37.9	249.7	6,049,711.64	2,969,244.09
Frontenac	1906	131.4	28.5	159.9	1,521,520.50	694,751.24
Grey	1918	183.2	34.2	217.4	3,281,797.82	1,618,022.06
Haldimand	1911	154.0	.....	154.0	2,485,159.29	1,141,239.24
Halton	1907	137.4	.....	137.4	2,215,929.63	1,012,019.41
Hastings	1904	291.0	.....	291.0	3,320,096.63	1,532,907.75
Huron	1917	358.7	.....	358.7	2,705,808.72	1,289,639.11
Kent	1917	262.7	9.5	272.2	4,338,085.37	2,165,374.43
Lambton	1918	228.9	12.0	240.9	2,592,561.94	1,247,283.38
Lanark	1903	237.8	7.2	245.0	2,738,843.91	1,291,508.21
Leeds and Grenville	1910	238.1	10.3	248.4	3,611,761.28	1,659,173.31
Lennox and Addington	1906	130.0	.....	130.0	2,614,589.48	1,261,970.44
Lincoln	1904	123.8	12.3	136.1	4,084,677.24	1,779,151.78
Middlesex	1906	386.5	35.2	421.7	4,188,055.70	1,909,717.68
Norfolk	1917	210.3	.....	210.3	3,125,995.34	1,477,324.48
Northumberland and Durham	1918	244.5	.....	244.5	3,094,854.26	1,519,141.41
Ontario	1918	198.8	13.5	212.3	1,978,687.70	955,709.81
Oxford	1904–7	191.1	3.9	195.0	2,848,140.54	1,251,372.00
Peel	1906	148.7	.....	148.7	2,504,365.77	1,114,064.97
Perth	1907	173.4	.....	173.4	1,666,613.14	748,346.69
Peterborough	1919	106.4	31.3	137.7	1,040,816.96	495,768.11
Prescott and Russell	1917	219.6	.....	219.6	4,224,379.23	1,884,743.54
Prince Edward	1907	147.2	.....	147.2	1,986,853.27	904,448.82
Renfrew	1918	219.1	.....	219.1	3,118,235.30	1,515,321.77
Simcoe	1903	303.8	.....	303.8	3,989,168.03	1,839,350.96
Stormont, Dundas and Glengarry	1917	461.7	.....	461.7	5,317,406.30	2,585,181.03
Victoria	1917	172.8	.....	172.8	2,483,184.94	1,230,606.72
Waterloo	1908	166.5	13.6	180.1	3,759,798.82	1,833,300.51
Welland	1912	101.6	16.4	118.0	4,655,162.15	2,148,229.30
Wellington	1903	317.7	12.5	330.2	3,610,652.22	1,678,726.78
Wentworth	1902	131.6	61.5	193.1	4,061,945.21	1,846,336.76
York	1911	39.4	260.2	299.6	12,186,731.91	5,678,690.53
Totals	....	7,480.0	743.8	8,223.8	127,329,523.13	59,904,618.74

APPENDIX No. 7

SUMMARY—1935

Work Done on County Roads

Name of County	Miles of Road Surfaced					New Bridges	Pipe and Tile Culverts	Steel Arch and Concrete Culverts
	Gravel or Stone	Surface Treated Macadam or Stone	Low-Cost Bituminous Surfaces	Mixed Macadam or Asphaltic Concrete	Cement Concrete			
Brant	1.00	0.25	2.00	.....	....	..	7	1
Bruce	9.00	.....	4.25	4.00	....	1	10	..
Carleton	8.70	2.10	1.96	0.50	....	..	22	..
Dufferin	2.30	.....	.....	.....	....	3	14	1
Elgin	1.00	.....	.....	.....	....	*1	7	..
Essex	0.50	.....	4.25	.....	....	2	5	..
Frontenac	......	.....	.....	1.00	....	..	11	..
Grey	4.80	.....	1.00	.....	....	1	...	..
Haldimand	2.25	.....	.....	.....	....	1	3	..
Halton	6.00	.....	3.70	.....	....	..	4	..
Hastings	3.00	.....	.....	.....	....	..	36	2
Huron	2.50	.....	1.66	.....	....	..	...	2
Kent	11.25	.....	1.00	.....	....	1	...	1
Lambton	7.75	.....	0.87	.....	....	..	44	..
Lanark	......	.....	.....	.....	....	1	...	..
Leeds and Grenville	1.50	1.00	.....	2.20	....	..	1	3
Lennox and Addington	3.00	.....	.....	.....	....	..	13	..
Lincoln	......	.....	.....	.....	....	..	2	4
Middlesex	2.00	.....	.....	.....	1.64	..	17	2
Norfolk	12.86	.....	.....	.....	....	..	3	5
Northumberland and Durham	......	.....	.....	.....	....	2	18	1
Ontario	5.13	.....	2.69	.....	....	1	53	2
Oxford	......	1.75	1.00	.....	....	3	...	..
Peel	......	.....	1.10	.....	....	..	...	..
Perth	5.75	.....	0.50	.....	....	..	8	3
Peterboro	2.00	3.20	1.25	.....	....	1	23	2
Prescott and Russell	2.87	.....	.....	.....	....	..	8	1
Prince Edward	......	.....	3.80	.....	....	..	18	..
Renfrew	......	.....	.....	.....	....	..	...	..
Simcoe	10.00	.....	.....	.....	....	..	10	6
Stormont, Dundas and Glen.	......	3.00	7.50	.....	....	1	1	..
Victoria	3.72	.....	.....	.....	....	1	29	..
Waterloo	10.25	.....	8.81	0.50	....	..	111	5
Welland	......	.....	.....	.....	....	..	1	..
Wellington	13.35	1.50	.....	.....	....	..	...	4
Wentworth	4.25	9.75	3.75	.....	0.15	..	4	4
York	7.94	.....	.....	1.87	0.65	..	290	9
Totals	144.67	22.55	51.09	10.07	2.44	20	773	58

*This bridge on Middlesex-Elgin Bdy.

APPENDIX No. 8

Name of County	Superintendence		Road and Culvert Construction	Urban Improvement		Bridge Construction
	Construction	Maintenance		Construction	Maintenance	
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Brant	2,339.82	2,102,76	18,153.47	2,243.03	....	....
Bruce	1,975.50	2,038.02	37,943.36	9,266.64	3,867.21	16,178 33
Carleton	4,433.00	3,830.45	54,237.80	3,603.28	....	....
Dufferin	1,369.00	2,210.08	6,514.30	....	898.49	1,828.87
Elgin	440.00	2,611.50	3,435.03	1,337.46	....	3,862.46
Essex	1,175.41	1,874.00	25,375.22	....	20,651.96	2,351.88
Frontenac	900.00	2,700.48	13,230.30	....	....	....
Grey	1,610.00	2,335.24	19,029.34	....	....	5,876.76
Haldimand	2,163.18	2,190.35	33,783.01	....	....	3,377.14
Halton	1,230.50	3,798.43	7,137.92	2,652.35	2,017.85	....
Hastings	400.00	3,318.96	9,436.31	....	....	....
Huron	481.00	3,996.32	9,411.72	....	....	....
Kent	1,332.00	3,084.48	39,025.43	....	4,264.28	2,815.81
Lambton	785.93	2,386.20	11,139.59	....	1,150.39	....
Lanark	1,078.60	2,716.34	....	....	1,786.36	9,985.67
Leeds and Grenville	1,700.00	1,813.01	40,220.69	....	1,577.87	....
Lennox and Addington	300.00	1,897.95	3,077.58	....	1,219.90	....
Lincoln	492.68	4,237.00	3,816.29	....	2,027.45	....
Middlesex	1,900.00	2,374.58	41,089.28	67.50	1,985.87	2,286.15
Norfolk	139.82	4,689.65	4,179.95	....	8,922.17	....
Northumberland and Durham	2,860.00	1,927.96	15,647.81	....	....	2,707.80
Ontario	2,362.81	2,364.00	30,371.60	6,110.15	....	....
Oxford	504.00	3,435.22	51.39	....	2,929.57	7,408.73
Peel	667.57	2,409.99	7,612.88	....	....	....
Perth	962.25	1,878.25	9,915.77	....	892.03	3,266.58
Peterboro	800.00	1,942.31	10,961.22	....	1,033.07	....
Prescott and Russell	644.04	1,894.40	9,697.64	....	856.85	....
Prince Edward	400.00	1,423.75	6,356.19	....	2,306.62	....
Renfrew	16.50	4,499.53	....	....	675.71	115.31
Simcoe	900.00	2,947.31	15,762.98	4,995.40	2,860.80	....
Stormont, Dundas and Glengarry	1,901.21	2,461.56	27,887.05	....	8,261.52	14,669.96
Victoria	1,435.75	2,650.00	11,012.94	13,392.12	731.90	....
Waterloo	3,858.25	2,708.87	88,783.46	....	17,689.91	1,020.84
Welland	555.00	2,711.90	3,762.08	3,905.77	941.57	....
Wellington	1,573.36	2,929.94	29,754.68	....	11,450.58	....
Wentworth	3,635.92	2,478.65	71,592.45	....	2,475.80	....
York	4,930.00	4,613.52	147,984.82	13,556.79	....	7,171.16
Totals	54,253.10	101,482.96	866,391.55	61,130.49	103,475.73	84,923.45

SUMMARY OF COUNTY ROAD EXPENDITURES—1935

"County" Bridges		Maintenance and Repair	Machinery		Total Approved Expenditure			Government Subsidy 50%
Construction	Maintenance		Construction	Maintenance	Construction	Maintenance	Total	
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
54.29	....	16,277.99	39.00	6,860.57	22,829.61	25,241.32	48,070.93	24,035.46
....	1,416.02	54,815.27	1,328.18	6,682.16	66,692.01	68,818.68	135,510.69	67,755.34
....	....	47,978.58	4,714.72	2,391.17	65,988.80	54,200.20	120,189.00	60,094.50
2,942.79	59.12	22,483.77	3,204.69	299.68	15,859.65	25,951.14	41.810.79	20,605.20
....	166.03	50,264.25	894.80	5,623.61	9,969.75	58,665.39	68,635.14	34,317.57
....	....	33,397.61	4,408.10	1,092.63	33,310.61	57,016.20	90,326.81	45,163.40
....	....	31,222.45	754.84	3,880.24	14,885.14	37,803.17	52,688.31	26,344.15
....	....	37,278.77	2,712.43	1,436.36	29,228.53	41,050.37	70,278.90	35,139.45
....	186.12	38,474.58	3,067.54	697.12	42,390.87	41,548.17	83,989.04	41,969.52
....	....	37,081.81	841.40	1,425.35	11,835.17	44,323.44	56,158.61	28,079.30
....	1,368.36	54,389.37	225.00	2,497.92	10,061.31	61,574.61	71,635.92	35,817.96
....	207.92	76,160.97	690.64	6,736.79	10,583.36	87,102.00	97,685.36	48,842.68
....	....	76,522.40	22.26	2,931.59	43,195.50	86,802.75	129,998.25	64,999.12
....	148.11	31,139.73	....	3,392.73	11,925.52	38,217.16	50,142.68	25,071.34
....	....	17,389.58	3,983.00	1,243.85	15,047.27	23,136.13	38,183.40	19,091.70
....	....	26,529.40	594.00	118.02	42,514.69	30,038.30	72,552.99	36,276.50
....	....	28,011.86	....	533.37	3,377.58	31,663.08	35,040.66	17,520.33
....	829.85	56,897.93	3,552.41	2,702.58	7,861.38	66,694.81	74,556.19	37,278.10
....	751.17	44,298.76	141.54	7,232.37	45,484.47	56,642.75	102,127.22	51,063.61
....	449.47	97,769.32	....	8,346.94	4,319.77	120,177.55	124,497.32	62,248.66
....	63.90	13,564.44	79.79	3,529.66	21,295.40	19,085.96	40,381.36	20,198.68
1,032.74	1,001.98	36,002.82	2,368.98	3,121.42	42,246.28	42,490.22	84,736.50	42,368.25
....	2,129.45	43,283.47	384.39	3,854.95	8,348.51	55,632.66	63,981.17	31,990.59
....	138.59	26,401.49	250.00	1,542.99	8,530.45	30,493.06	39,023.51	19,511.75
....	52.95	23,140.13	....	1,115.30	14,144.60	27,078.66	41,223.26	20,611.63
2,797.74	4,886.85	26,010.85	3,809.25	4,417.05	18,368.21	38,290.13	56,658.34	28,329.17
....	2,690.40	24,529.48	....	....	10,341.68	29,971.13	40,312.81	20,156.40
....	79.15	30,601.08	29.93	1,419.48	6,786.12	35,830.08	42,616.20	21,308.10
....	168.88	20,678.37	....	1,192.68	131.81	27,215.17	27,346.98	13,673.49
....	103.92	74,627.09	3,549.60	1,252.90	25,207.98	81,792.02	107,000.00	53,489.61
....	....	47,336.05	1,135.00	....	45,593.22	58,059.13	103,652.35	51,826.17
1,265.09	527.62	43,795.84	....	2,271.90	24,105.90	49,977.26	77,083.16	38,541.58
....	2,476.05	42,493.70	5,295.45	3,127.44	98,958.00	68,495.97	167,453.97	83,726.98
....	210.79	35,590.00	....	347.73	8,222.85	39,801.99	48,024.84	24,012.42
....	164.28	54,842.59	4,251.99	2,030.07	35,580.03	71,417.46	106,997.49	53,498.74
....	178.75	48,764.48	9,195.46	7,230.97	84,423.83	61,128.65	145,552.48	72,776.24
....	236.42	158,977.94	7,511.92	6,160.12	181,154.69	169,988.00	351,142.69	175,547.70
8,092.65	20,692.15	1,629,024.22	69,009.31	108,739.71	1,143,800.55	1,963,414.77	3,107,215.32	1,553,273.39

APPENDIX

SUMMARY—
Expenditure on Maintenance and

Name of County	Brushing and Weed Cutting	Ditching	Grading	Dragging
	$ c.	$ c.	$ c.	$ c.
Brant	1,223.38	1,396.30	....	2,893.61
Bruce	2,199.82	360.98	2,600.66	8,673.47
Carleton	3,942.28	477.16	2,974.02	4,959.98
Dufferin	1,327.35	60.40	587.00	4,313.48
Elgin	1,697.12	1,864.21	5,862.82	4,346.06
Essex	3,483.08	733.78	676.55	5,470.93
Frontenac	2,401.54	5,269.86	10,112.20	1,293.39
Grey	2,045.31	1,126.52	2,293.15	4,922.03
Haldimand	1,577.85	1,872.36	323.82	2,719.83
Halton	1,006.07	449.36	2,004.36	4,368.64
Hastings	1,416.19	....	9,140.50	5,527.39
Huron	2,931.38	3,655.74	1,795.39	10,892.50
Kent	3,986.92	2,720.12	3,089.00	17,468.59
Lambton	2,392.25	2,513.56	645.45	10,553.93
Lanark	954.13	346.26	2,084.45	562.85
Leeds and Grenville	834.90	....	1,849.33	2,729.82
Lennox and Addington	1,128.53	83.35	863.30	75.30
Lincoln	2,624.92	771.46	660.51	135.10
Middlesex	3,557.91	953.70	1,791.17	7,357.27
Norfolk	1,120.25	309.14	1,321.09	4,483.70
Northumberland and Durham	1,020.87	251.53	2,323.64	3,579.67
Ontario	1,798.83	606.72	1,153.13	5,107.32
Oxford	2,554.28	511.21	886.93	7,010.59
Peel	1,353.04	72.40	861.66	3,715.98
Perth	1,267.72	168.52	160.85	5,414.33
Peterboro	704.93	359.38	706.19	5,862.64
Prescott and Russell	1,719.02	1,249.60	2,293.60	1,243.63
Prince Edward	1,634.98	425.51	1,865.79	26.25
Renfrew	1,033.14	....	2,678.85	790.00
Simcoe	1,994.23	809.48	10,806.10	11,023.54
Stormont, Dundas and Glengarry	3,605.83	181.95	4,290.70	....
Victoria	1,232.41	223.45	134.50	6,862.41
Waterloo	1,417.06	1,470.35	1,596.03	4,434.37
Welland	3,466.99	684.20	568.90	....
Wellington	3,976.56	2,688.60	426.53	6,435.09
Wentworth	5,126.53	3,761.96	4,814.12	4,093.10
York	11,663.16	5,005.95	9,261.36	5,120.91
Totals	$87,420.76	43,435.07	95,603.65	174,467.70

No. 9

1935
Repair of County Roads

Culverts (Repairs Only)	Bridge (Repairs Only)	Re-Surfacing	Stabilizing Oiling, etc.	Snow Roads	Wire Fence Bonus and Guide Rails	Total Subsidisable Expenditure
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
460.05	23.32	9,481.13	....	655.71	144.49	16,277.99
215.05	1,588.64	21,075.29	7,294.64	10,806.72	....	54,815.27
1,012.08	961.17	13,334.88	7,880.07	11,455.32	981.62	47,978.58
138.79	304.74	11,197.63	1,446.09	3,060.08	48.21	22,483.77
382.52	601.84	29,006.06	5,447.20	1,056.42	....	50,264.25
222.83	100.43	13,692.31	8,640.23	271.18	106.29	33,397.61
1,751.76	18.40	1,518.60	4,060.63	4,796.07	....	31,222.45
167.41	267.42	12,341.74	9,327.49	4,787.70	....	37,278.77
647.52	279.63	27,869.11	724.23	1,231.88	1,228.35	38,474.58
1,550.19	337.73	24,382.12	1,677.59	1,214.20	91.55	37,081.81
1,626.23	549.98	28,222.60	4,056.42	3,850.06	....	54,389.37
1,237.94	636.22	34,743.85	13,569.80	5,421.04	1,277.11	76,160.97
1,104.72	15,669.99	30,724.55	....	164.24	1,594.27	76,522.40
1,336.47	1,379.24	10,988.08	16.80	981.84	232.11	31,139.73
1,635.83	3,061.22	5,885.29	600.18	2,138.62	120.75	17,389.58
659.05	180.92	15,488.59	4,280.37	257.60	248.82	26,529.40
383.52	503.38	11,350.08	11,184.13	2,440.27	....	28,011.86
313.49	630.59	21,238.96	25,886.49	3,140.24	1,496.17	56,897.93
683.22	3,393.29	21,797.32	2,113.92	2,650.96	....	44,298.76
885.70	517.38	85,425.19	719.55	1,811.57	1,175.75	97,769.32
412.50	149.41	4,005.56	....	1,659.03	162.23	13,564.44
983.70	284.30	18,712.86	4,123.93	2,958.83	273.20	36,002.82
162.21	130.98	25,003.28	2,438.09	4,357.28	228.62	43,283.47
269.16	69.52	13,631.12	2,430.03	2,491.53	1,507.05	26,401.49
132.33	88.29	13,219.85	745.25	1,874.70	68.29	23,140.13
153.57	....	14,136.91	2,536.42	1,550.81	....	26,010.85
144.20	731.05	14,039.05	....	3,109.33	....	24,529.48
1,087.68	9.18	19,922.05	1,100.19	4,048.00	481.45	30,601.08
1,920.52	287.28	9,345.23	3,309.10	1,296.24	18.01	20,678.37
5,501.53	347.10	35,971.84	1,975.11	5,424.41	773.75	74,627.09
601.61	788.63	23,842.27	10,141.67	2,914.16	969.23	47,336.05
102.38	40.97	25,289.39	6,735.08	2,743.54	431.71	43,795.84
303.48	1,439.83	13,402.58	15,134.12	2,888.27	407.61	42,493.70
485.84	960.69	1,978.32	25,894.23	1,550.73	....	35,590.00
2,163.65	1,717.35	22,997.33	4,813.50	4,704.90	4,919.08	54,842.59
589.61	....	13,446.68	12,404.74	4,527.74	....	48,764.48
67.73	3,253.59	62,759.22	33,424.01	28,422.01	....	158,977.94
31,496.07	41,303.80	761,466.92	236,131.30	138,713.23	18,985.72	1,629,024.22

APPENDIX

SUMMARY OF EXPENDITURE ON

The following schedule shows the approved expenditure on township

Year	No. of Twps.	Roads and Culverts	Bridges	General Maintenance	Machinery	Superintendence
		$ c.	$ c.	$ c.	$ c.	$ c.
1920 to 1934	172 to 338	17,415,367.95	4,637,929.24	30,941,679.92	2,323,851.88	2,671,828.52
1935	339	628,855.34	98,623.04	1,844,654.47	127,708.09	214,688.40
Totals	. . .	18,044,223.29	4,736,552.28	32,786,334.39	2,451,559.97	2,886,516.92

No. 10

TOWNSHIP ROADS

roads under the provisions of The Highway Improvement Act.

Total Approved Expenditure			Government Subsidy		
Construction	Maintenance	Total	Construction	Maintenance	Total
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
23,718,523.99	34,272,133.52	57,990,657.51	7,615,854.36	10,959,400.20	18,575,254.56
824,447.33	2,090,082.01	2,914,529.34	344,705.13	874,448.05	1,219,153.18
24,542,971.32	36,362,215.53	60,905,186.85	7,960,559.49	11,833,848.25	19,794,407.74

APPENDIX

SUMMARY OF COUNTY AND

NAME OF COUNTY	TOWNSHIP ASSESSMENTS (Exclusive of Urban Assessments)		COUNTY LEVY BASED ON EQUALIZED				
			King's Highway		County Roads		
	Equalized	Local	Debent.	Current	Debent.	Current	Education
	$	$	$	$	$	$	$
Brant	16,752,000	12,930,096	18,260	12,396	24,256	24,659	29,148
Bruce	23,233,034	22,506,502	......	40,370	1,736	55,675	45,590
Carleton	23,998,946	16,813,837	70,627	......	137,874	17,161	65,054
Dufferin	11,386,943	8,738,759	20,040	......	......	15,942	17,536
Elgin	26,193,987	21,358,457	......	12,459	......	30,189	50,888
Essex	38,719,000	30,848,155	......	25,048	27,957	38,714	46,463
Frontenac–	5,790,006	4,589,220	31,935	......	......	16,583	28,545
Grey	30,380,000	21,497,652	18,865	23,045	21,478	30,730	65,283
Haldimand	10,335,410	10,270,281	33,409	......	17,260	36,175	37,020
Halton	21,265,908	12,881,620	14,342	4,438	53,133	14,886	39,199
Hastings–	8,037,300	7,387,060	......	16,075	7,524	16,075	24,336
Huron	38,103,105	33,019,162	11,146	30,767	......	45,723	52,502
Kent	34,658,037	28,637,597	......	46,441	......	62,379	66,196
Lambton	27,633,600	24,991,799	......	38,514	......	25,302	71,024
Lanark–	9,344,500	7,291,668	18,570	3,484	50,085	4,981	21,802
Leeds and Grenville–	14,691,220	13,642,266	23,684	41,567	43,330	29,383	52,070
Lennox and Addington–	5,546,213	4,677,958	5,433	1,831	31,047	10,232	11,759
Lincoln	13,607,117	12,077,071	11,247	5,478	95,230	27,034	40,393
Middlesex	47,536,687	39,775,458	74,137	25,006	23,216	44,042	92,990
Norfolk	20,513,900	13,362,792	13,162	2,542	54,353	40,203	14,506
Northumberland and Durham	24,642,400	20,241,115	22,939	......	37,085	13,702	79,496
Ontario	19,814,185	19,053,965	39,959	9,313	13,806	35,588	53,307
Oxford	25,521,300	24,517,060	......	26,740	17,859	31,197	48,134
Peel	14,947,653	13,090,057	41,214	12,556	29,446	18,684	51,959
Perth	32,016,995	25,843,731	......	38,303	......	21,887	22,800
Peterboro–	8,853,021	7,777,213	7,462	16,653	......	21,308	20,539
Prescott and Russell	17,963,401	13,468,294	......	......	133,468	35,927	31,973
Prince Edward	10,723,750	8,161,106	4,396	7,378	9,180	16,085	17,941
Renfrew	13,686,122	8,336,457	17,313	......	56,261	1,916	31,260
(10 Twps.) Simcoe–	23,105,000	18,098,382	......	......	......	18,484	36,967
Stormont, Dundas and Glen.	27,674,204	26,580,881	22,972	28,780	33,761	35,147	73,891
Victoria–	12,491,839	9,006,050	7,706	3,611	11,009	21,221	15,352
Waterloo	20,994,000	16,687,945	6,003	13,687	....	41,966	12,283
Welland	27,455,238	26,533,972	......	1,300	20,713	17,160	77,154
Wellington	28,782,570	23,470,719	......	18,420	......	43,173	45,475
Wentworth	25,496,042	19,055,057	84,086	....	1,148	57,314	40,103
York	89,410,602	93,994,350	62,183	17,963	36,378	87,585	363,940
Grand Totals	851,305,235	721,211,764	681,090	524,165	988,583	1,104,412	1,894,878

–Includes only townships working under Highway Improvement Act.

No. 11

TOWNSHIP LEVIES—1935

ASSESSMENT		TOWNSHIP LEVY BASED ON TOWNSHIP ASSESSMENT					Total Road Levy	Per Cent. of Road Levy to Total Levy
Miscellaneous	Total	County Levy	Township Roads	Education	Miscellaneous	Total Levy		
$	$	$	$	$	$	$	$	%
29,484	138,203	138,591	61,076	77,913	78,459	356,039	140,647	39.5
51,602	194,973	191,476	65,662	120,459	61,455	439,052	163,443	37.2
132,451	423,167	424,661	47,445	225,222	184,379	881,707	273,107	1.0
31,883	85,401	85,763	31,033	64,327	43,383	224,506	67,015	29.9
50,529	144,065	145,018	45,702	113,069	72,263	376,052	88,350	23.5
108,612	246,794	249,217	63,414	199,574	416,121	928,326	155,133	16.7
45,335	122,398	121,365	17,281	49,690	30,120	218,456	65,799	30.1
71,074	230,475	254,227	79,900	165,779	51,668	551,574	174,018	31.6
62,173	186,037	186,227	30,359	59,474	29,181	305,241	117,203	38.4
38,088	164,086	163,759	25,500	68,732	81,789	339,780	112,299	33.1
56,550	120,560	120,159	14,773	56,611	19,314	210,857	54,447	25.8
69,428	209,566	210,803	63,796	156,890	134,010	565,499	151,432	26.8
83,180	258,196	259,019	104,256	166,751	338,475	868,501	213,076	24.5
63,922	198,762	194,061	65,384	122,859	171,995	554,299	129,200	23.3
35,405	134,327	134,590	16,220	58,570	36,398	245,778	93,340	38.0
73,461	263,495	264,298	27,659	129,235	87,940	509,132	165,623	32.5
49,900	110,202	114,967	11,919	34,552	22,401	183,839	60,462	32.9
81,074	260,456	263,945	63,160	149,928	71,666	548,699	202,149	37.0
135,164	394,555	395,010	67,702	187,018	107,257	756,987	234,103	30.9
76,557	201,323	202,500	38,813	88,038	46,334	375,685	149,073	39.6
99,655	252,877	256,385	84,369	166,317	47,269	554,340	158,095	28.5
63,811	215,784	216,946	55,968	147,665	79,483	500,062	154,634	30.9
56,156	180,086	180,371	51,842	124,835	63,303	420,351	127,638	30.3
42,371	196,230	198,036	33,382	145,924	95,736	473,078	135,282	28.6
29,072	112,062	113,530	44,973	100,327	74,671	333,501	105,163	31.5
52,499	118,461	119,878	26,585	72,046	32,422	250,931	72,008	28.6
110,297	311,665	312,412	43,692	136,614	98,978	591,696	213,087	36.0
35,572	90,552	89,917	10,463	56,619	16,971	173,970	47,502	27.3
74,601	181,341	181,539	4,270	14,586	8,735	209,130	79,750	38.1
113,216	168,667	168,838	47,138	121,226	91,819	429,021	65,622	15.3
98,241	292,792	290,174	74,781	232,442	182,038	779,435	195,441	25.1
36,039	94,938	95,170	27,465	66,528	23,085	212,248	71,012	33.4
76,207	150,146	142,183	46,399	108,318	70,247	367,147	108,055	29.4
89,587	205,914	206,421	70,615	298,029	396,431	971,496	109,788	11.3
52,036	159,104	160,466	60,747	129,131	55,512	405,856	122,340	30.1
44,948	227,599	208,325	55,432	142,600	86,631	492,988	197,980	40.1
356,470	924,519	918,273	385,232	1,625,368	3,098,909	6,027,782	589,341	9.8
2,776,650	7,969,778	7,978,520	2,064,407	5,983,266	6,606,848	22,633,041	5,362,657	23.7

APPENDIX No. 12

SUMMARY—1935
Work Done on Township Roads

Townships in the Counties of:	Miles of Road Surfaced				New Bridges	Pipe and Tile Culverts	Steel Arch and Concrete Culverts
	Gravel or Stone	Surface-Treated Macadam or Stone	Low-Cost Bituminous Surfaces	Cement Concrete			
Brant	14.5	....	...	...	..	37	..
Bruce	15.0	....	...	...	8	60	9
Carleton	9.0	....	...	...	3	25	2
Dufferin	16.2	....	...	...	2	53	3
Elgin	2.4	....	...	...	..	22	1
Essex	1.3	....	...	...	1	8	..
Frontenac	10.0	....	...	...	..	14	1
Grey	10.6	....	...	...	4	46	5
Haldimand	31.0	1.5	...	...	..	34	1
Halton	5.0	....	...	...	2	35	2
Hastings	6.5	....	...	...	2	82	..
Huron	7.4	....	...	...	1	36	6
Kent	42.0	....	...	...	2	195	9
Lambton	21.0	1.7	1.0	...	1	74	4
Lanark	7.0	....	...	...	2	23	..
Leeds and Grenville	.....	....	...	...	..	20	2
Lennox and Addington	1.0	....	...	...	..	17	1
Lincoln	30.0	2.0	...	...	..	50	2
Middlesex	7.5	....	...	...	1	84	2
Norfolk	13.7	....	...	...	..	37	1
Northumberland and Durham	44.5	....	...	2.0	1	115	3
Ontario	11.9	....	...	...	1	57	3
Oxford	9.2	1.0	...	...	..	39	3
Peel	3.7	....	...	...	1	58	2
Perth	1.5	....	...	...	2	24	..
Peterboro	14.8	....	...	...	..	29	..
Prescott and Russell	24.5	....	...	...	1	7	2
Prince Edward	26.0	....	...	...	..	38	2
Renfrew	0.3	....	...	...	..	4	..
Simcoe	26.9	....	...	...	2	49	4
Stormont, Dundas and Glen.	13.0	....	...	...	6	40	2
Victoria	6.0	....	...	...	3	30	3
Waterloo	17.0	....	...	...	4	41	..
Welland	19.0	9.5	...	...	..	83	2
Wellington	9.0	....	...	...	9	64	3
Wentworth	22.8	....	...	...	..	49	1
York	14.2	....	...	...	5	130	6
Totals	515.4	15.7	1.0	2.0	64	1809	87

APPENDIX

ROAD SURFACES—END

County	County Roads					
	Earth	Gravel or Stone	Surface-Treated Macadam	Bituminous Macadam	Asphaltic Concrete	Cement Concrete
Brant	9.3	66.1	0.3	15.7	.....	0.9
Bruce	.....	189.9	46.2	23.1	.....	.....
Carleton	15.6	124.4	29.8	47.9	40.3	.....
Dufferin	.....	143.7	.....	.....	.....	.....
Elgin	.....	240.7	0.3	0.1	.....	.....
Essex	.....	184.9	.....	5.6	15.2	44.0
Frontenac	.....	104.2	44.7	3.5	7.5	.....
Grey	.....	191.2	10.6	12.3	.....	3.3
Haldimand	.....	87.9	60.8	5.3	.....	.....
Halton	.....	80.9	33.8	2.7	.....	20.0
Hastings	.....	261.1	18.0	.....	9.6	2.3
Huron	.....	326.1	20.1	1.1	.....	11.4
Kent	6.2	228.5	.....	7.8	6.3	23.4
Lambton	.....	226.5	.....	6.7	4.2	3.5
Lanark	9.6	181.7	19.7	34.0	.....	.....
Leeds and Grenville	40.5	145.5	4.5	25.3	29.8	2.8
Lennox and Addington	.....	73.5	9.5	.....	47.0	.....
Lincoln	.....	7.8	87.4	26.1	2.6	12.2
Middlesex	.....	374.2	.....	.....	.....	47.5
Norfolk	10.2	124.8	59.6	15.4	.....	0.3
Northumberland and Durham	.....	183.2	.....	5.3	47.1	8.9
Ontario	.....	200.0	.....	5.3	0.3	6.7
Oxford	.....	189.1	1.8	2.6	.....	1.5
Peel	.....	133.1	1.0	11.3	0.5	2.8
Perth	.....	166.2	3.7	2.5	.....	1.0
Peterboro	.....	133.6	2.2	1.9	.....	.....
Prescott and Russell	18.0	96.2	86.8	.....	18.6	.....
Prince Edward	.....	78.7	45.9	1.8	12.5	8.3
Renfrew	35.9	140.7	35.4	7.1	.....	.....
Simcoe	4.0	294.1	1.5	0.9	2.0	1.3
Stormont, Dundas and Glengarry	10.5	224.6	162.1	58.0	5.2	1.3
Victoria	5.6	154.6	6.2	3.9	2.5	.....
Waterloo	.....	110.7	4.2	27.3	3.9	34.0
Welland	1.5	2.0	72.3	12.0	20.0	10.2
Wellington	1.9	307.0	1.8	2.7	3.4	13.4
Wentworth	4.0	106.9	48.4	22.9	4.0	6.9
York	2.4	81.5	75.6	81.4	52.3	6.4
Totals	175.2	5,965.8	994.2	479.5	334.8	274.3

No. 13

OF 1935

	TOWNSHIP ROADS						
Total	Earth	Gravel or Stone	Surface-Treated Macadam	Bituminous Macadam	Asphaltic Concrete	Cement Concrete	Total
92.3	238.6	312.0	.....	0.3	....	0.6	551.5
259.2	286.9	1,374.0	.....	....	....	....	1,660.9
258.0	378.6	695.5	1.2	....	....	....	1,075.3
143.7	321.7	472.0	.....	....	....	....	793.7
241.1	159.0	765.4	.....	....	....	....	924.4
249.7	138.1	720.9	.....	....	....	9.9	868.9
159.9	546.1	475.2	.....	1.0	....	....	1,022.3
217.4	641.3	1,553.0	.....	....	....	....	2,194.3
154.0	237.7	338.1	8.9	....	....	5.0	589.7
137.4	97.8	324.7	.....	....	....	1.8	424.3
291.0	771.4	746.6	.....	....	....	....	1,518.0
358.7	243.0	1,432.3	.....	....	....	....	1,675.3
272.2	314.5	1,022.6	1.3	0.4	....	....	1,338.8
240.9	480.2	941.3	.....	1.0	....	....	1,422.5
245.0	576.4	407.1	.....	....	....	....	983.5
248.4	546.8	812.1	.....	3.0	....	....	1,361.9
130.0	292.2	445.0	.....	....	....	....	737.2
136.1	417.2	244.6	3.0	....	....	5.0	669.8
421.7	226.5	1,400.0	.....	....	....	0.2	1,626.7
210.3	541.3	373.9	2.8	....	....	....	918.0
244.5	888.5	1,440.6	.....	....	....	....	2,329.1
212.3	409.3	763.6	.....	....	....	....	1,172.9
195.0	83.0	1,011.3	0.9	....	....	....	1,095.2
148.7	311.7	344.2	.....	....	0.2	....	656.1
173.4	89.8	979.8	.....	....	....	....	1,069.6
137.7	438.7	569.0	.....	....	....	....	1,007.7
219.6	779.6	240.7	.....	....	....	....	1,020.3
147.2	69.3	350.8	.....	....	....	....	420.1
219.1	538.3	269.9	.....	....	....	....	808.2
303.8	1,007.2	1,026.9	.....	....	....	....	2,034.1
461.7	581.0	788.4	.....	3.6	....	4.9	1,377.9
172.8	604.0	471.9	0.4	....	....	....	1,076.3
180.1	67.5	530.1	.....	....	....	0.2	597.8
118.0	519.5	326.8	86.0	1.5	6.2	0.7	940.7
330.2	632.3	714.0	.....	....	....	0.4	1,346.7
193.1	188.2	365.1	.....	....	....	....	553.3
299.6	709.6	884.5	12.3	4.8	86.1	15.3	1,712.6
8,223.8	15,372.8	25,933.9	116.8	15.6	92.5	44.0	41,575.6

APPENDIX No. 14

SUMMARY OF 1935 COUNTY LEVIES ON BASIS OF EQUALIZED ASSESSMENT

Name of County	Equalized Assessment		Roads and Bridges					Other Purposes			Total Levy
			The King's Highways		County Roads and Bridges						
	Total	Per Acre	Debentures	Current	Debentures	Current	Total	Educational	Miscellaneous	Totals	
	$	$	Mills	Mills	Mills	Mills	Mills	Mills	Mills	Mills	Mills
Brant	19,826,800	92	1.09	.74	1.45	1.47	4.75	1.74	1.76	3.50	8.25
Bruce	28,639,030	30	....	1.71	.07	2.35	4.13	1.93	2.19	4.12	8.25
Carleton	27,969,123	49	2.94	....	5.75	.71	9.40	2.71	5.52	8.23	17.63
Dufferin	13,364,550	37	1.76	....	....	1.40	3.16	1.54	2.80	4.34	7.50
Elgin	30,370,345	69	....	.48	....	1.15	1.63	1.94	1.93	2.87	5.50
Essex	61,690,000	149	....	.65	.73	1.00	2.38	1.20	2.82	4.02	6.40
Frontenac	7,246,850	11	5.80	....	....	3.50	9.30	4.93	7.83	12.76	22.06
Grey	34,850,000	32	.62	.75	.70	1.00	3.07	2.13	2.30	4.43	7.50
Haldimand	11,920,410	42	3.23	....	1.67	3.50	8.40	3.58	6.02	9.60	18.00
Halton	31,913,780	140	.67	.21	1.71	.70	3.29	1.84	1.79	3.63	6.92
Hastings	18,354,800	17	....	2.00	.94	2.00	4.94	3.03	7.03	10.06	15.00
Huron	44,271,175	55	.29	.81	....	1.20	2.30	1.38	1.82	3.20	5.50
Kent	39,897,117	70	....	1.34	....	1.80	3.14	1.91	2.40	4.31	7.45
Lambton	31,126,000	46	....	1.39	....	.92	2.31	2.57	2.31	4.88	7.19
Lanark	15,000,000	22	1.99	0.37	5.36	.53	8.25	2.33	3.79	6.12	14.37
Leeds and Grenville	17,672,000	25	1.61	2.82	2.96	2.00	9.39	3.54	5.00	8.54	17.93
Lennox and Addington	9,637,295	21	0.98	.33	5.58	2.00	8.89	2.12	8.99	11.11	20.00
Lincoln	19,000,000	99	.82	.40	7.00	1.99	10.21	2.97	5.96	8.93	19.14
Middlesex	51,045,045	67	1.56	.52	.49	.92	3.49	1.96	2.84	4.80	8.29
Norfolk	28,498,200	72	.65	.12	2.68	1.96	5.41	.49	3.75	4.24	9.65
Northumberland and Durham	35,963,000	44	.93	....	1.50	.56	2.99	3.23	4.04	7.29	10.26
Ontario	24,421,141	46	2.02	.47	.70	1.79	4.98	2.69	3.22	5.91	10.89
Oxford	28,632,200	60	....	1.05	.70	1.22	2.97	1.88	2.20	4.08	7.05
Peel	19,980,822	68	2.75	.84	1.97	1.25	6.81	3.48	2.84	6.32	13.13
Perth	35,107,419	67	....	1.20	....	.68	1.88	.71	.91	1.62	3.50
Peterborough	10,094,318	18	.84	1.88	....	2.41	5.13	2.32	5.93	8.25	13.38
Prescott and Russell	20,555,591	37	....	....	7.43	2.00	9.43	1.78	6.14	7.92	17.35
Prince Edward	15,000,000	63	.41	.69	.85	1.50	3.45	1.67	3.32	4.99	8.44
Renfrew	28,460,230	28	1.27	....	4.11	.14	5.52	2.28	5.45	7.73	13.25
Simcoe	59,670,000	61	....	....	....	.80	.80	1.60	4.90	6.50	7.30
Stormont, Dundas and Glengarry	39,332,029	51	.83	1.04	1.22	1.27	4.36	2.67	3.55	6.22	10.58
Victoria	22,478,450	38	.62	.29	.88	1.70	3.49	1.23	2.88	4.11	7.60
Waterloo	38,305,000	122	.29	.65	....	2.00	2.94	.58	3.63	4.21	7.15
Welland	42,168,947	186	....	.05	.76	.63	1.44	2.80	3.26	6.06	7.50
Wellington	35,425,709	56	....	.64	....	1.50	2.14	1.58	1.81	3.39	5.53
Wentworth	29,355,981	110	3.30	....	.04	2.25	5.59	1.57	1.76	3.33	8.92
York	124,446,842	228	.69	.20	.41	.98	2.28	3.23	3.99	7.22	9.50

Report of Motor Vehicles Branch, 1935

To The Honourable T. B. McQuesten,
Minister of Highways.

Sir:—I have the honour to submit herewith the annual report of the Motor Vehicles Branch for the year 1935.

Appended are the following:

(a) A detailed statement of the motor vehicle permits and drivers' licenses issued for the calendar year 1935.
(b) A statement, duly certified by the Provincial Auditor, showing the revenue derived from all sources during the period from November 1st. 1934 to March 31st. 1935.
(c) A similar statement covering the fiscal year ending March 31st. 1936.
(d) Reports showing the activities and operations of the Financial Responsibility and Accident Recording Divisions of the Motor Vehicles Branch during the calendar year 1935.

Motor Vehicle Registrations

The number of vehicles in all classes showed substantial increases over the totals of the previous year, and total registrations reached a new high record. Passenger vehicles numbered 489610 an increase of 18993 over the 1934 total; commercial vehicles totalled 67590, trailers 24,232, motor cycles 4506, and two-purpose vehicles 370, or 588,308 in all. This was almost 5% greater than the 1934 total.

Drivers' Licenses

The number of drivers licensed also reached a new high record with the issuance of 511,346 operators' licenses, 196,111 chauffeurs' licenses, and 77,378 instruction permits. The ratio of drivers' licenses to motor vehicle permits was somewhat higher; 130 to 100 in 1934 and 133to 100 in 1935. The Total number of licenses issued was approximately 50,000 higher than the previous record set in 1934.

Public Vehicles and Public Commercial Vehicles

In 1935, 4834 Public Commercial Vehicles and 597 Public Vehicles owned by 2320 operators were licensed.

Licenses were distributed in the various classes as follows:

Class	Vehicles	Operators
Public Vehicles	597	102
Public Commercial Vehicles A	1825	247
" " " B	169	126
" " " C	878	430
" " " D	454	149
" " " E	1508	1266

The gross revenue collected by these divisions also reached new high levels, $303,035.39 having deposited with the Provincial Treasurer.

Revenue

The gross revenue collected during the 17 months covered by the appended statements amounted to $15,571,624.76 or a monthly average of $915,977.93 which was 33.6% above the monthly average during the preceding fiscal year. The net revenue for the 17 month period totalled—$15,283,071.89.

Financial Responsibility Division

Since the formation of this Division in 1930 over 21,000 suspension cases have been dealt with. The number of suspensions made effective during the year 1935 under the F. R. Provisions of the Act totalled 3547 and at December 31st. there were in effect 5520 suspension orders, of this class.

Drivers' records which are also compiled in this Division now cover histories of over 175,000 Operators against whom there had been recorded complaint, certificate of conviction for an offence against the Highway Traffic Act or the Criminal Code involving the use of motor vehicles, report of accident, report of physical or mental unfitness, notice of an unsatisfied judgment arising out of a motor vehicle accident, or an order of suspension.

Accident Recording Division

In the effort to curtail the ever increasing hazard of motor vehicle accidents, a hazard that increases annually with each increase in motor vehicle registrations, the first essential is the discovery of the nature and cause of the accidents which occur. The Accident Reporting Division, established at the same time as the Financial Responsibility Division, has recorded and analyzed over 50,000 reports since its inception. The number of accidents reported during 1935 reached a total of 10,648, deaths numbered 560, persons injured, 9,839 and property damage amounted to $1,085,084.

This Division is also responsible for the preparation and dissemination of information regarding the occurrence and prevention of accidents and to this end approximately 30 bulletins were issued during the year. The work also included the promotion of an advertising campaign using billboards, newspaper advertisements and radio and, a very popular game, designed to show children many of the traffic hazards to be avoided, was distributed through the schools.

All of which is respectfully submitted.

J. P. Bickell,
Registrar of Motor Vehicles.

1935 STATISTICS

MOTOR VEHICLE REGISTRATIONS

Automobile Permits	489,610
Commercial Permits	67,590
Convertible Permits	2,370
Trailer Permits	24,232
Motor Cycle Permits	4,506
Automobile Dealers' Permits	1,245
Commercial Dealers' Permits	70
Motor Cycle Dealers' Permits	8
Operators	510,513
Instruction Permits	77,378
Motor Cycle Operators	833
Chauffeurs	196,111
In Transits	19,941
Transfers	82,614
Public Vehicles	597
Public Commercial Vehicles	4,834

1935

PASSENGER CAR REGISTRATIONS

ONTARIO

PASSENGER CARS

Cylinders and Horse Power

Four Cylinders	200,841	
Six Cylinders (under 28 horsepower)	224,241	
Six Cylinders (over 28 horsepower)	14,826	
Eight Cylinders (under 35 horsepower)	44,595	
Eight Cylinders (over 35 horsepower)	4,128	
Twelve Cylinders	172	
Sixteen Cylinders	33	
Electric	3	
Steam	8	
Free	763	
		489,610

Registrations

Originals	42,768	
Renewals	446,842	
		489,610

COMMERCIAL CARS REGISTERED

Tires

Pneumatic	64,383	
Solid	236	
Municipal	2,119	
Ontario Government Dominion Government	852	
		67,590

Gross Weight—Pneumatic Tires

Less than two tons	26,592	
Of two tons and up to three tons	16,245	
More than three tons and up to four tons	8,177	
" " four " " " " five "	4,611	
" " five " " " " six "	2,718	
" " six " " " " seven "	2,205	
" " seven " " " " eight "	1,792	
" " eight " " " " nine "	658	
" " nine " " " " ten "	1,208	
" " ten " " " " eleven "	94	
" " eleven " " " " twelve "	50	
" " twelve " " " " thirteen "	3	
" " thirteen " " " " fourteen "	3	
" " fourteen " " " " fifteen "	27	
		64,383

Gross Weight—Solid Tires

Less than two tons	16	
Of two tons and up to three tons	21	
More than three tons and up to four tons	8	
" " four " " " " five "	19	
" " five " " " " six "	21	
" " six " " " " seven "	28	
" " seven " " " " eight "	75	
" " eight " " " " nine "	24	
" " nine " " " " ten "	18	
" " ten " " " " eleven "	1	
" " eleven " " " " twelve "	5	
		236
Municipal	2,119	
Ontario Government Dominion Government	852	
		67,590

CONVERTIBLE CARS REGISTERED

Convertible Vehicles		2,370
Less than two tons	2,356	
Of two tons and up to three tons	7	
Ontario Government Dominion Government	7	
		2,370

PASSENGER CARS REGISTERED

Counties		Cities		
Algoma	2,655	Sault Ste. Marie	2,519	5,174
Brant	3,165	Brantford	4,315	7,480
Bruce	7,377			7,377
Carleton	5,020	Ottawa	16,973	21,993
Dufferin	2,612			2,612
Dundas	2,488			2,488
Durham	4,200			4,200
Elgin	4,911	St. Thomas	2,525	7,436
Essex	12,400	Windsor	9,633	22,033
Frontenac	2,687	Kingston	3,575	6,262
Glengarry	1,953			1,953
Grenville	2,493			2,493
Grey	6,435	Owen Sound	1,729	8,164
Haldimand	4,528			4,528
Haliburton	666			666
Halton	4,969			4,969
Hastings	6,783	Belleville	2,220	9,003
Huron	7,498			7,498
Kenora	1,444			1,444
Kent	9,238	Chatham	2,933	12,171
Lambton	6,410	Sarnia	3,148	9,558
Lanark	4,741			4,741
Leeds	4,957			4,957
Lennox and Addington	2,994			2,994
Lincoln	4,506	St. Catharines	4,256	8,762
Manitoulin	1,075			1,075
Middlesex	8,152	London	11,952	20,104
Muskoka	2,653			2,653
Nipissing	2,687	North Bay	1,708	4,395
Norfolk	5,763			5,763
Northumberland	4,470			4,470
Ontario	5,480	Oshawa	3,878	9,358
Oxford	7,307	Woodstock	1,733	9,040
Parry Sound	2,463			2,463
Peel	5,315			5,315
Perth	5,885	Stratford	2,366	8,251
Peterborough	3,196	Peterborough	3,179	6,375
Prescott	1,746			1,746
Prince Edward	2,874			2,874
Rainy River	1,392			1,392

PASSENGER CARS REGISTERED—*Continued*

Renfrew	5,579			5,579
Russell	1,662			1,662
Simcoe	11,640			11,640
Stormont	4,032			4,032
Sudbury	1,862	Sudbury	2,846	4,708
Thunder Bay	1,400	Fort William	2,651	
		Port Arthur	2,468	6,519
Timiskaming	7,264			7,264
Victoria	4,503			4,503
Waterloo	7,069	Galt	1,908	
		Kitchener	4,123	13,100
Welland	6,896	Niagara Falls	3,716	
		Welland	1,860	12,472
Wellington	6,145	Guelph	2,888	9,033
Wentworth	5,052	Hamilton	21,066	26,118
York	17,832	Toronto	108,472	126,304
Foreign	446			446
	258,970		230,640	489,610

COMMERCIAL CARS REGISTERED

Counties		Cities		Total
Algoma	458	Sault Ste. Marie	415	873
Brant	436	Brantford	700	1,136
Bruce	552			552
Carleton	742	Ottawa	2,324	3,066
Dufferin	216			216
Dundas	221			221
Durham	381			381
Elgin	572	St. Thomas	263	835
Essex	1,728	Windsor	1,531	3,259
Frontenac	410	Kingston	563	973
Glengarry	222			222
Grenville	293			293
Grey	487	Owen Sound	217	704
Haldimand	477			477
Haliburton	80			80
Halton	758			758
Hastings	901	Belleville	345	1,246
Huron	649			649
Kenora	579			579
Kent	1,008	Chatham	504	1,512
Lambton	574	Sarnia	325	899
Lanark	449			449
Leeds	755			755
Lennox and Addington	371			371
Lincoln	1,099	St. Catharines	753	1,852
Manitoulin	99			99
Middlesex	899	London	1,581	2,480
Muskoka	480			480
Nipissing	393	North Bay	322	715
Norfolk	808			808
Northumberland	609			609
Ontario	679	Oshawa	411	1,090
Oxford	935	Woodstock	210	1,145
Parry Sound	437			437
Peel	914			914
Perth	505	Stratford	298	803
Peterborough	329	Peterborough	476	805
Prescott	215			215
Prince Edward	378			378
Rainy River	322			322
Renfrew	556			556
Russell	262			262
Simcoe	1,431			1,431
Stormont	455			455
Sudbury	479	Sudbury	467	946

COMMERCIAL CARS REGISTERED—*Continued*

Thunder Bay	324	Fort William	532	
		Port Arthur	498	1,354
Timiskaming	1,131			1,131
Victoria	456			456
Waterloo	733	Galt	247	
		Kitchener	640	1,620
Welland	1,147	Niagara Falls	455	
		Welland	249	1,851
Wellington	496	Guelph	447	943
Wentworth	1,114	Hamilton	3,083	4,197
York	2,948	Toronto	15,524	18,472
Foreign	258			258
	34,210		33,380	67,590

CONVERTICLE VEHICLES REGISTERED, 1935

Counties		Cities		Total
Algoma	18	Sault Ste. Marie	4	22
Brant	50	Brantford	36	86
Bruce	28			28
Carleton	42	Ottawa	24	66
Dufferin	8			8
Dundas	12			12
Durham	69			69
Elgin	47	St. Thomas	2	49
Essex	44	Windsor	21	65
Frontenac	36	Kingston	11	47
Glengarry	6			6
Grenville	18			18
Grey	33	Owen Sound	10	43
Haldimand	19			19
Haliburton	6			6
Halton	35			35
Hastings	52	Belleville	25	77
Huron	43			43
Kenora	7			7
Kent	42	Chatham	9	51
Lambton	36	Sarnia	4	40
Lanark	52			52
Leeds	47			47
Lennox and Addington	22			22
Lincoln	52	St. Catharines	9	61
Manitoulin				
Middlesex	92	London	27	119
Muskoka	16			16
Nipissing	10	North Bay		10
Norfolk	39			39
Northumberland	40			40
Ontario	39	Oshawa	13	52
Oxford	89	Woodstock	9	98
Parry Sound	17			17
Peel	30			30
Perth	30	Stratford	10	40
Peterborough	33	Peterborough	12	45
Prescott	15			15
Prince Edward	13			13
Rainy River	10			10
Renfrew	19			19
Russell	9			9
Simcoe	77			77
Stormont	26			26
Sudbury	7	Sudbury	5	12
Thunder Bay	6	Fort William	7	
		Port Arthur	9	22
Timiskaming	94			94
Victoria	22			22

CONVERTICLE VEHICLES REGISTERED, 1935—*Continued*

Waterloo	27	Galt	14	
		Kitchener	4	45
Welland	68	Niagara Falls	10	
		Welland	9	87
Wellington	28	Guelph	14	42
Wentworth	40	Hamilton	32	72
York	94	Toronto	226	320
Foreign				
	1,814		556	2,370

TRAILERS REGISTERED

Counties		Cities		Total
Algoma	76	Sault Ste. Marie	134	210
Brant	347	Brantford	200	547
Bruce	432			432
Carleton	308	Ottawa	485	793
Dufferin	131			131
Dundas	131			131
Durham	222			222
Elgin	517	St. Thomas	119	636
Essex	830	Windsor	379	1,209
Frontenac	112	Kingston	148	260
Glengarry	67			67
Grenville	85			85
Grey	298	Owen Sound	93	391
Haldimand	336			336
Haliburton	31			31
Halton	254			254
Hastings	611	Belleville	144	755
Huron	305			305
Kenora	41			41
Kent	754	Chatham	174	928
Lambton	616	Sarnia	113	729
Lanark	235			235
Leeds	193			193
Lennox and Addington	182			182
Lincoln	257	St. Catharines	174	431
Manitoulin	33			33
Middlesex	789	London	487	1,276
Muskoka	105			105
Nipissing	55	North Bay	72	127
Norfolk	557			557
Northumberland	281			281
Ontario	257	Oshawa	219	476
Oxford	617	Woodstock	62	679
Parry Sound	79			79
Peel	343			343
Perth	535	Stratford	128	663
Peterborough	174	Peterborough	160	334
Prescott	91			91
Prince Edward	214			214
Rainy River	166			166
Renfrew	267			267
Russell	65			65
Simcoe	565			565
Stormont	146			146
Sudbury	64	Sudbury	63	127
Thunder Bay	36	Fort William	117	
		Port Arthur	59	212
Timiskaming	231			231
Victoria	230			230
Waterloo	470	Galt	81	
		Kitchener	188	739
Welland	370	Niagara Falls	149	
		Welland	84	603
Wellington	395	Guelph	114	509
Wentworth	355	Hamilton	848	1,203
York	880	Toronto	3,355	4,235
Foreign	142			142
	15,883		8,349	24,232

Trailer Gross Weight

One ton or less	21,056
More than one ton and up to two tons	718
More than two tons and up to three tons	230
“ “ three “ “ “ “ four “	241
“ “ four “ “ “ “ five “	366
“ “ five “ “ “ “ six “	353
“ “ six “ “ “ “ seven “	306
“ “ seven “ “ “ “ eight “	521
“ “ eight “ “ “ “ nine “	15
“ “ nine “ “ “ “ ten “	55
“ “ ten “ “ “ “ eleven “	......
“ “ eleven “ “ “ “ twelve “	......
“ “ twelve “ “ “ “ thirteen “	......
“ “ thirteen “ “ “ “ fourteen “	......
“ “ fourteen “ “ “ “ fifteen “	9
Municipal	287
Free	75
	24,232

AUTOMOBILE DEALERS REGISTERED

Counties		Cities		Total
Algoma	1	Sault Ste. Marie	11	12
Brant	4	Brantford	15	19
Bruce	15		......	15
Carleton	12	Ottawa	69	81
Dufferin	9		......	9
Dundas	7		......	7
Durham	8		......	8
Elgin	5	St. Thomas	9	14
Essex	9	Windsor	48	57
Frontenac	2	Kingston	20	22
Glengarry	2		......	2
Grenville	8		......	8
Grey	11	Owen Sound	10	21
Haldimand	17		......	17
Haliburton	......		......	....
Halton	10		......	10
Hastings	18	Belleville	11	29
Huron	17		......	17
Kenora	10		......	10
Kent	15	Chatham	13	28
Lambton	8	Sarnia	5	13
Lanark	16		......	16
Leeds	9		......	9
Lennox and Addington	3		......	3
Lincoln	3	St. Catharines	15	18
Manitoulin	......		......	....
Middlesex	3	London	25	28
Muskoka	5		......	5
Nipissing	3	North Bay	7	10
Norfolk	7		......	7
Northumberland	6		......	6
Ontario	22	Oshawa	32	54
Oxford	15	Woodstock	9	24
Parry Sound	6		......	6
Peel	7		......	7
Perth	13	Stratford	11	24
Peterborough	......	Peterborough	15	15
Prescott	7		......	7
Prince Edward	8		......	8
Rainy River	6		......	6
Renfrew	26		......	26
Russell	3		......	3
Simcoe	25		......	25
Stormont	16		......	16
Sudbury	1	Sudbury	11	12
Thunder Bay	1	Fort William	7	....
		Port Arthur	7	15

AUTOMOBILE DEALERS REGISTERED—*Continued*

Timiskaming	30			30
Victoria	10			10
Waterloo	11	Galt	6	
		Kitchener	17	34
Welland	5	Niagara Falls	5	
		Welland	10	20
Wellington	16	Guelph	14	30
Wentworth	5	Hamilton	54	59
York	28	Toronto	282	310
Foreign	3			3
	507		738	1,245

COMMERCIAL DEALERS REGISTERED, 1935

Counties		Cities		Total
Algoma		Sault Ste. Marie		
Brant		Brantford	1	1
Bruce				
Carleton		Ottawa	2	2
Dufferin				
Dundas				
Durham				
Elgin		St. Thomas		
Essex	2	Windsor	5	7
Frontenac		Kingston		
Glengarry				
Grenville				
Grey		Owen Sound		
Haldimand				
Haliburton				
Halton				
Hastings		Belleville		
Huron				
Kenora				
Kent		Chatham	1	1
Lambton		Sarnia		
Lanark				
Leeds				
Lennox and Addington				
Lincoln	1	St. Catharines	2	3
Manitoulin				
Middlesex		London	4	4
Muskoka				
Nipissing		North Bay		
Norfolk				
Northumberland				
Ontario		Oshawa	1	1
Oxford		Woodstock		
Parry Sound				
Peel				
Perth		Stratford		
Peterborough		Peterborough		
Prescott				
Prince Edward				
Rainy River				
Renfrew				
Russell				
Simcoe				
Stormont				
Sudbury		Sudbury		
Thunder Bay		Fort William		
		Port Arthur		
Timiskaming				
Victoria				
Waterloo		Galt		
		Kitchener	3	3
Welland	1	Niagara Falls	1	
		Welland		2

COMMERCIAL DEALERS REGISTERED, 1935—*Continued*

Wellington	......	Guelph	......	......
Wentworth	......	Hamilton	12	12
York	......	Toronto	34	34
Foreign	......		......	......
	4		66	70

MOTOR CYCLES REGISTERED, 1935

Counties		Cities		Total
Algoma	19	Sault Ste. Marie	23	42
Brant	29	Brantford	26	55
Bruce	19		......	19
Carleton	46	Ottawa	218	264
Dufferin	9		......	9
Dundas	17		......	17
Durham	24		......	24
Elgin	28	St. Thomas	30	58
Essex	35	Windsor	85	120
Frontenac	10	Kingston	59	69
Glengarry	13		......	13
Grenville	12		......	12
Grey	24	Owen Sound	5	29
Haldimand	18		......	18
Haliburton	2		......	2
Halton	42		......	42
Hastings	38	Belleville	16	54
Huron	55		......	55
Kenora	20		......	20
Kent	34	Chatham	12	46
Lambton	21	Sarnia	21	42
Lanark	25		......	25
Leeds	34		......	34
Lennox and Addington	10		......	10
Lincoln	47	St. Catharines	33	80
Manitoulin	5		......	5
Middlesex	45	London	145	190
Muskoka	32		......	32
Nipissing	24	North Bay	13	37
Norfolk	54		......	54
Northumberland	30		......	30
Ontario	64	Oshawa	48	112
Oxford	57	Woodstock	15	72
Parry Sound	16		......	16
Peel	53		......	53
Perth	37	Stratford	35	72
Peterborough	11	Peterborough	28	39
Prescott	15		......	15
Prince Edward	21		......	21
Rainy River	7		......	7
Renfrew	36		......	36
Russell	7		......	7
Simcoe	63		......	63
Stormont	74		......	74
Sudbury	7	Sudbury	20	27
Thunder Bay	16	Fort William	25	......
		Port Arthur	9	50
Timiskaming	106		......	106
Victoria	19		......	19
Waterloo	81	Galt	17	......
		Kitchener	68	166
Welland	65	Niagara Falls	21	......
		Welland	23	109
Wellington	35	Guelph	13	48
Wentworth	48	Hamilton	192	240
York	231	Toronto	1,414	1,645
Foreign	2		......	2
	1,892		2,614	4,506

MOTOR VEHICLES BRANCH

Highways Department

Revenue for Fiscal Year 1935-1936

		Gross	Deductions	Net
Passenger car permits		$5,231,335.50	$ 86,309.35	$5,145,026.15
Commercial permits		2,456,986.50	12,470.00	2,444,516.50
Automobile dealer permits		30,767.00	25.00	30,742.00
Commercial dealer permits		338.00	....	338.00
Motorcycle dealer permits		24.00	....	24.00
Trailer permits		222,475.25	4,119.15	218,356.10
Two purpose permits		13,341.50	183.20	13,158.30
Chauffeurs		229,225.00	17,556.70	211,668.30
Operators and instructions		569,202.00	52,916.40	516,285.60
Motorcycle permits		12,018.00	333.35	11,684.65
Transfers		178,882.00	5,685.20	173,196.80
Duplicate cards		7,477.50	1.00	7,476.50
In transits		9,828.50	748.90	9,079.60
Certificates and searches		482.25	....	482.25
Fines		82, 108.80	299.00	81,809.80
Lists		2 ,212.53	....	2,212.53
Public vehicles		10 5,491.54	....	105,491.54
Public commercial vehicles		158,184.27	808.23	157,376.04
Postage		69.02	....	69.02
Testing headlights		60.00	....	60.00
Examination fees		14,949.00	21.00	14,928.00
Miscellaneous		8.65	....	8.65
		$9,325,466.81	$ 181,476.48	$9,143,990.33
Express charges paid by agents		$ 125.33		
Balances due from agents		218.40		
Less amount overcharged on commercials		13.00		
Less amount overcharged on Acct. No. 113		17.00		
Underdrawn		.20		
Adjustments on Previous Balances		3.90		
			377.83	
		$9,325,466.81	$ 181,854.31	$9,143,612.50
Bank interest	5.31			
Stamps	.06			
Overdrawn	125.80			
				652.27
1934-1935 balances paid	521.10			
				$9,144,264.77

MOTOR VEHICLES BRANCH

Highways Department

Revenue for Fiscal Year 1935-1936

		Gross	Deductions	Net
Passenger Car Permits		$5,231,335.50		
Commercial permits		2,456,986.50		
Automobile dealer permits		30,767.00		
Commercial dealer permits		338.00		
Motorcycle dealer permits		24.00		
Trailer permits		222,475.25		
Two purpose permits		13,341.50		
Chauffeurs		229,225.00		
Operators		569,202.00		
Motorcycle permits		12,018.00		
Transfers		178,882.00		
Duplicate cards		7,477.50		
In transits		9,828.50		
Certificates and searches		482.25		
Fines		82,108.80		
Lists		2,212.53		
Public vehicles		105,491.54		
Public commercial vehicles		158,184.27		
Postage		69.02		
Testing headlights		60.00		
Examination fees		14,949.00		
Miscellaneous		8.65		
			$9,325,466.81	
LESS:				
Commissions deducted by agents		177,774.75		
Express charges paid by agents		125.33		
Refunds deducted by Provincial Treasurer		2,846.00		
Balances due from agents		218.40		
Amount overcharged on Acct. No. 113		17.00		
Amount overcharged on commercial		13.00		
Journal entries re-fines		76.00		
Journal entries re Ont. Municipal Board fees		779.73		
Underdrawn		.20		
Adjustments on previous balances		3.90		
			181,854.31	9,143,612.50
Bank interest	5.31			
Stamps	.06			
1934-1935 balances paid	521.10			
Overdrawn	125.80			
				652.27
				$9,144,264.77

MOTOR VEHICLES BRANCH

Highways Department

Itemized Statement of Receipts for Fiscal Year 1935-1936

PASSENGER CARS

180,104 at	$ 7.00	4 cyl.	$1,260,728.00	
3,903 at	3.50	(half fee)	13,660.50	
233,105 at	12.00	6 cyl.	2,797,260.00	
4,288 at	6.00	(half fee)	25,728.00	
13,212 at	15.00	6 cyl.	198,180.00	
353 at	7.50	(half fee)	2,647.50	
55,034 at	15.00	8 cyl.	825,510.00	
1,213 at	7.50	(half fee)	9,097.50	
4,198 at	20.00	8 cyl.	83,960.00	
96 at	10.00	(half fee)	960.00	
208 at	30.00	12 cyl.	6,240.00	
3 at	15.00	(half fee)	45.00	
33 at	40.00	16 cyl.	1,320.00	
3 at	20.00	electric	60.00	
4 at	20.00	steam	80.00	
2,857 at	2.00	new sets	5,714.00	
47 at	—— ——	new sets (no fee).		
771 free.				
(499,432)		Balance of fees	145.00	
				$5,231,335.50

COMMERCIALS

Pneumatic Tires

25,786 at $ 10.00	$ 257,860.00
1,241 at 5.00 (half fee)	6,205.00
14,262 at 24.00	342,288.00
796 at 12.00 (half fee)	9,552.00
4 at 6.00 (quarter fee)	24.00
7,479 at 48.00	358,992.00
322 at 24.00 (half fee)	7,728.00
3 at 12.00 (quarter fee)	36.00
4,548 at 65.00	295,620.00
211 at 32.50 (half fee)	6,857.50
2 at 16.25 (quarter fee)	32.50
2,615 at 84.00	219,660.00
138 at 42.00 (half fee)	5,796.00
1 at 21.00 (quarter fee)	21.00
2,306 at 98.00	225,988.00
102 at 49.00 (half fee)	4,998.00
2,119 at 112.00	237,328.00
115 at 56.00 (half fee)	6,440.00
693 at 144.00	99,792.00
40 at 72.00 (half fee)	2,880.00
1,131 at 170.00	192,270.00
33 at 85.00 (half fee)	2,805.00
3 at 198.00	594.00
1 at 99.00 (half fee)	99.00
21 at 228.00	4,788.00
6 at 260.00	1,560.00
3 at 294.00	882.00
30 at 330.00	9,900.00

Solid Tires

9 at $ 16.00	$ 144.00
4 at 8.00 (half fee)	32.00
16 at 33.00	528.00
2 at 16.50 (half fee)	33.00
9 at 60.00	540.00
13 at 80.00	1,040.00
1 at 40.00 (half fee)	40.00
14 at 102.00	1,428.00
18 at 119.00	2,142.00
1 at 59.50 (half fee)	59.50
60 at 136.00	8,160.00
1 at 68.00 (half fee)	68.00
19 at 171.00	3,249.00
2 at 85.50 (half fee)	171.00
15 at 200.00	3,000.00
1 at 100.00 (half fee)	100.00
1 at 231.00	231.00
2 at 264.00	528.00
3 at 132.00 (half fee)	396.00
2,158 at 2.00 municipal	4,316.00
1,041 at 2.00 new sets	2,082.00
28 new sets (no fee).	
1,025 free.	
Increase cap	$ 51,108.50

BUSSES

18 at $ 24.00	432.00
33 at 36.00	1,188.00
81 at 55.00	4,455.00
1 at 27.50 (half fee)	27.50
128 at 72.00	9,216.00
2 at 36.00 (half fee)	72.00
84 at 84.00	7,056.00
105 at 96.00	10,080.00
45 at 117.00	5,265.00
2 at 58.50 (half fee)	117.00
108 at 130.00	14,040.00
2 at 65.00 (half fee)	130.00
94 at 165.00	15,510.00

BUSSES—(Continued)

	50 at 180.00	9,000.00	
	3 at 2.00 new sets	6.00	
(69,210)			$2,456,986.50

"M" DEALERS

1935 FEES

	88 at $ 20.00	$ 1,760.00	
	4 at 10.00 (half fee)	40.00	

1936 FEES

	1,157 at $ 25.00	$ 28,925.00	
	21 at 2.00 new sets	42.00	
(1,270)			$ 30,767.00

"M. T" DEALERS

	2 at $ 24.00	$ 48.00	
	3 at 48.00	144.00	
	1 at 144.00	144.00	
(7)	1 at 2.00 new sets	2.00	
			$ 338.00

"M. C" DEALERS

(4)	4 at 6.00	24.00	$ 24.00

TRAILERS

	19,536 at $ 3.00	58,608.00	
	2,263 at 1.50 (half fee)	3,394.50	
	661 at 10.00	6,610.00	
	63 at 5.00 (half fee)	315.00	
	229 at 21.00	4,809.00	
	17 at 10.50 (half fee)	178.50	
	1 at 5.25 (quarter fee)	5.25	
	218 at 32.00	6,976.00	
	27 at 16.00 (half fee)	432.00	
	366 at 50.00	18,300.00	
	13 at 25.00 (half fee)	325.00	
	309 at 66.00	20,394.00	
	20 at 33.00 (half fee)	660.00	
	368 at 77.00	28,336.00	
	17 at 38.50 (half fee)	654.50	
	651 at 88.00	57,288.00	
	28 at 44.00 (half fee)	1,232.00	
	18 at 108.00	1,944.00	
	1 at 54.00 (half fee)	54.00	
	63 at 120.00	7,560.00	
	1 at 154.00	154.00	
	10 at 210.00	2,100.00	
	2 at 105.00 (half fee)	210.00	
	1 at 52.50 (quarter fee)	52.50	
	282 at 2.00 munic.	564.00	
	122 at 1.00 new sets	122.00	
	1 new set (no fee).		
	92 free.		
(25,380)			
	Incr. Capacity	1,197.00	
			$ 222,475.25

TWO PURPOSE

1935 FEES

	648 at $ 10.00	$ 6,480.00	
	49 at 5.00 (half fee)	245.00	
	3 at 24.00	72.00	

1936 FEES

	433 at $ 7.00 4 cyl.	$ 3,031.00	
	240 at 12.00 6 cyl.	2,880.00	
	5 at 15.00 6 cyl.	75.00	
	11 at 15.00 8 cyl.	165.00	
	115 at 2.00 new sets	230.00	
	7 free.		
	Bal. of fees	163.50	
(1511)			$ 13,341.50

Chauffeurs

18,156 at $	2.00 origls.	$ 36,312.00	
3,847 at	1.00 origls. (half fee)	3,847.00	
186,709 at	1.00 renls.	186,709.00	
	21 origls. free.		
	13 renls. free.		
(208,746)			
(1934 and 1935)	prev. yr. fees	2,331.00	
	prev. yr. fees	26.00	
			$ 229,225.00

Operators

524,770 at $	1.00 operators	$ 524,770.00	
79,382 at	.50 instr	39,691.00	
818 at	1.00 M.C. operators	818.00	
	2 free operators.		
	1 free M.C. operators.		
(604,793)			
(1934 and 1935)	prev. yr. fees	3,890.00	
	prev. yr. operators fees	27.00	
(1934)	prev. yr. M.C. operators	6.00	
			$ 569,202.00

Motorcycles

3,852 at $	3.00	$ 11,556.00	
154 at	1.50 (half fee)	231.00	
13 at	1.00 new sets	13.00	
109 at	2.00, municipal	218.00	
	2 new sets. No fee.		
	119 free.		
(4,249)			$ 12,018.00

Transfers

77,129 at $	2.00, passenger	$ 154,258.00	
5,639 at	2.00, commercial	11,278.00	
606 at	1.00, motorcycles	606.00	
217 at	2.00, two purpose	434.00	
109 at	2.00, trailers	218.00	
6 at	2.00, "M" dealers	12.00	
(83,706)			
10,979 at	1.00, dealers passenger	10,979.00	
1,097 at	1.00, dealers commercial	1,097.00	
(12,076)			$ 178,882.00

Duplicate Cards

3,366 at	.50, passenger cars	$ 1,683.00	
583 at	.50, commercial	291.50	
53 at	.50, Motorcycles	26.50	
21 at	.50, two purpose	10.50	
72 at	.50, trailers	36.00	
721 at	.50, passenger transfer	360.50	
69 at	.50, commercial transfer	34.50	
4 at	.50, M.C. transfer	2.00	
2 at	.50, two purpose transfer	1.00	
1 at	.50, trailer transfer	.50	
5 at	.50, dealer passenger transfer	2.50	
3 at	.50, "M" dealers	1.50	
548 at $	.50, chauffeurs' originals	$ 274.00	
3,331 at	.50, chauffeurs' renewals	1,665.50	
6,144 at	.50, operators	3,072.00	
21 at	.50, M.C. operators	10.50	
(14,944)			
5 at	.50, (1933)	2.50	
6 at	.50, (1934)	3.00	
			$ 7,477.50

In Transits

19,657 at $	.50	$ 9,828.50	$ 9,828.50

SEARCHES AND CERTIFICATES			
1 at $ .15		$ .15	
914 at .25		228.50	
133 at .50		66.50	
1 at .60		.60	
60 at .75		45.00	
30 at 1.00		30.00	
12 at 1.25		15.00	
10 at 1.50		15.00	
9 at 1.75		15.75	
11 at 2.00		22.00	
2 at 2.25		4.50	
4 at 2.50		10.00	
1 at 2.75		2.75	
2 at 3.00		6.00	
2 at 3.25		6.50	
2 at 4.50		9.00	
1 at 5.00		5.00	
(1,195)			$ 482.25
MISCELLANEOUS			$ 8.65
FINES			82,108.80
LISTS			2,212.53
PUBLIC VEHICLES			105,491.54
PUBLIC COMMERCIAL VEHICLES			158,184.27
POSTAGE			69.02
TESTING HEADLIGHTS			60.00
EXAMINATION FEES			14,949.00
COMMISSIONS PAID TO AGENTS:			
Passenger cars	$ 85,303.85		
Commercials	11,108.00		
Two purpose	183.20		
Motorcycles	324.35		
Trailers	3,980.15		
Transfers	5,682.20		
In transits	738.40		
Operators and instructions	52,899.90		
Chauffeurs	17,554.70		
		$ 177,774.75	
CARTAGE AND EXPRESS CHARGES PAID BY AGENTS		125.33	
REFUNDS:			
Passenger cars	1,005.50		
Commercials	1,362.00		
Trailers	139.00		
"M" dealers	25.00		
Chauffeurs	2.00		
Operators and instructions	16.50		
Motorcycles	9.00		
Transfers	3.00		
Fines	223.00		
Public commercial vehicles	28.50		
Examination fees	21.00		
Duplicate cards	1.00		
In transits	10.50		
		2,846.00	
Balances due from agents		218.40	
Overcharge on account No. 113		17.00	
Overcharge on commercials		13.00	
Journal entries re-fines		76.00	
Journal entries re-Ontario Municipal Board Fees		779.73	
Underdrawn		.20	
Adjustments on previous balances		3.90	
Deposited with treasury as shown by treasurer's statement		9,144,264.77	
		$9,326,119.08	
Interest	5.31		
Stamps	.06		
Overdrawn	125.80		
1934-1935 balances paid	521.10		652.27
	$9,325,466.81		$9,325,466.81

MOTOR VEHICLES BRANCH

Highways Department

Revenue for the Fiscal Year 1934-1935

	Gross	Deductions	Net
Passenger car permits	$3,640,128.00	$ 59,090.70	$3,581,037.30
Commercial permits	1,835,296.50	8,818.25	1,826,384.25
Automobile dealer permits	23,064.00	....	23,064.00
Commercial dealer permits	5,061.00	....	5,061.00
Motorcycle dealer permits	48.00	....	48.00
Trailer permits	133,883.50	1,459.70	132,423.80
Two purpose permits	16,892.00	308.25	16,583.75
Chauffeurs	145,457.00	9,743.20	135,713.80
Operators	343,110.50	26,399.85	316,710.65
Motorcycle permits	6,252.50	162.30	6,090.20
Transfers	33,562.00	1,011.65	32,550.35
Duplicate cards	2,120.50	....	2,120.50
In transits	3,429.00	272.85	3,156.15
Certificates and searches	195.75	....	195.75
Fines	12,860.37	36.00	12,824.37
Lists	531.57	....	531.57
Public vehicles	34,211.32	....	34,211.32
Public commercial vehicles	6,148.26	....	6,148.26
Postage	41.33	....	41.33
Testing headlights	30.00	....	30.00
Examination fees	3,823.00	5.00	3,818.00
Miscellaneous	11.85	....	11.85
	$6,246,157.95	$ 107,307.75	$6,138,756.20
Express charges paid by agents	64.76		
Balances due and overpaid credit from agents	521.10		
Less amount overcharged on commercials	47.00		
Uncollectable accounts	6.30	639.16	
	$6,246,157.95	$ 107,946.91	$6,138,211.04
Bank interest	11.28		
1933-34 Balances paid	493.94		
Uncollectable accounts	6.30		
Amount overcharged on commercials	47.00		
Previous year fees paid	37.56		596.08
			$6,138,807.12

MOTOR VEHICLES BRANCH

Highways Department

Revenue for Fiscal Year 1934-1935

Passenger car permits	$3,640,128.00	
Commercial permits	1,835,296.50	
Automobile dealer permits	23,064.00	
Commercial dealer permits	5,061.00	
Motorcycle dealer permits	48.00	
Trailer permits	133,883.50	
Two purpose permits	16,892.00	
Chauffeurs	145,457.00	
Operators	343,110.50	
Motorcycle permits	6,252.50	
Transfers	33,562.00	
Duplicate cards	2,120.50	
In transits	3,429.00	
Certificates and searches	195.75	
Fines	12,860.37	
Lists	531.57	
Public vehicles	34,211.32	
Public commercial vehicles	6,148.26	
Postage	41.33	
Testing headlights	30.00	
Examinations fees	3,823.00	
Miscellaneous	11.85	
		6,246,157.95

LESS:				
Commissions deducted by agents		$ 105,911.75		
Express charges paid by agents		64.76		
Refunds deducted by Provincial Treasurer		1,396.00		
Balances due and overpaid credit from agents		521.10		
Uncollectable accounts		6.30		
Amount overcharged on commercials		47.00		
			107,946.91	
				$6,138,211.04
Bank interest			11.28	
1933-34 Balances paid	493.94			
Uncollectable accounts	6.30			
Amount overcharged on commercials	47.00			
		547.24		
Previous year fees paid		37.56		596.08
				$6,138,807.12

MOTOR VEHICLES BRANCH

Highways Department

Itemized Statement of Receipts for Fiscal Year 1934-1935

PASSENGER CARS			
141,358 at	$ 7.00 (4-cyl.)	$ 989,506.00	
736 at	3.50 (half fee)	2,576.00	
161,567 at	12.00 (6-cyl)	1,938,804.00	
987 at	6.00 (half fee)	5,922.00	
10,489 at	15.00 (6-cyl.)	157,335.00	
110 at	7.50 (half fee)	825.00	
31,176 at	15.00 (8-cyl.)	467,640.00	
384 at	7.50 (half fee)	2,880.00	
3,368 at	20.00 (8-cyl.)	67,360.00	
26 at	10.00 (half fee)	260.00	
148 at	30.00 (12-cyl.)	4,440.00	
1 at	15.00 (half fee)	15.00	
31 at	40.00 (16-cyl.)	1,240.00	
3 at	20.00 electric	60.00	
5 at	20.00 steam	100.00	
548 at	2.00, new sets	1,096.00	
16, new sets. No fee.			
687, free.			
(351640)	Balance of fees	69.00	$3,640,128.00

COMMERCIALS	**Pneumatic Tires**		
17,751 at	$ 10.00	$ 177,510.00	
368 at	5.00 (half fee)	1,840	
12,116 at	24.00	290,784.00	
78 at	12.00 (half fee)	936.00	
203 at	6.00 (quarter fee)	1,218.00	
6,349 at	48.00	304,752.00	
24 at	24.00 (half fee)	576.00	
109 at	12.00 (quarter fee)	1,308.00	
3,458 at	65.00	224,770.00	
12 at	32.50 (half fee)	390.00	
68 at	16.25 (quarter fee)	1,105.00	
2,027 at	84.00	170,268.00	
17 at	42.00 (half fee)	714.00	
45 at	21.00 (quarter fee)	945.00	
1,695 at	98.00	166,110.00	
12 at	49.00 (half fee)	588.00	
39 at	24.50 (quarter fee)	955.50	
1,331 at	112.00	149,072.00	
7 at	56.00 (half fee)	392.00	
24 at	28.00 (quarter fee)	672.00	
517 at	144.00	74,448.00	
2 at	72.00 (half fee)	144.00	
16 at	36.00 (quarter fee)	576.00	
898 at	170.00	152,660.00	
13 at	42.50 (quarter fee)	552.50	
3 at	198.00	594.00	
14 at	228.00	3,192.00	
2 at	260.00	520.00	
3 at	294.00	882.00	
23 at	330.00	7,590.00	

COMMERCIALS—(Continued)

Solid Tires

6 at	$ 16.00	$ 96.00	
2 at	8.00 (half fee)	16.00	
15 at	33.00	495.00	
8 at	60.00	480.00	
16 at	80.00	1,280.00	
20 at	102.00	2,040.00	
22 at	119.00	2,618.00	
71 at	136.00	9,656.00	
16 at	171.00	2,736.00	
13 at	200.00	2,600.00	
1 at	231.00	231.00	
3 at	264.00	792.00	
1,911 at	2.00, municipals	3,822.00	
213 at	2.00, new sets	426.00	
3, new sets. No fee.			
670, free.			
	Increased capacity and balance fees	12,652.50	
BUSSES			
1 at	$ 10.00	$ 10.00	
1 at	5.00 (half fee)	5.00	
21 at	24.00	504.00	
29 at	36.00	1,044.00	
1 at	9.00 (quarter fee)	9.00	
54 at	55.00	2,970.00	
117 at	72.00	8,424,00	
1 at	18.00 (quarter fee)	18.00	
70 at	84.00	5,880.00	
90 at	96.00	8,640.00	
33 at	117.00	3,861.00	
94 at	130.00	12,220.00	
81 at	165.00	13,365.00	
13 at	180.00	2,340.00	
1 at	2.00, new set	2.00	
(50,821)			$1,835,296.50
"M" DEALERS			
1,153 at	20.00	23,060.00	
2 at	2.00, new sets	4.00	
(1,155)			$ 23,064.00
"M.C" DEALERS			
(8) 8 at	6.00	48.00	$ 48.00
"M.T" DEALERS			
9 at	$ 24.00	$ 216.00	
20 at	48.00	960.00	
7 at	65.00	455.00	
5 at	84.00	420.00	
3 at	98.00	294.00	
8 at	112.00	896.00	
5 at	144.00	720.00	
5 at	170.00	850.00	
1 at	198.00	198.00	
1 at	50.00, (trailer)	50.00	
(65) 1 at	2.00, new set	2.00	
			$ 5,061.00
TRAILERS			
7,033 at	$ 3.00	$ 21,099.00	
530 at	1.50 (half fee)	795.00	
439 at	10.00	4,390.00	
21 at	5.00 (half fee)	105.00	
160 at	21.00	3,360.00	
10 at	5.25 (quarter fee)	52.50	
164 at	32.00	5,248.00	
1 at	16.00 (half fee)	16.00	
8 at	8.00 (quarter fee)	64.00	
293 at	50.00	14,650.00	
1 at	12.50 (quarter fee)	12.50	
285 at	66.00	18,810.00	
10 at	16.50 (quarter fee)	165.00	
246 at	77.00	18,942.00	
4 at	19.25 (quarter fee)	77.00	

TRAILERS—(Continued)		
432 at 88.00	38,016.00	
5 at 22.00 (quarter fee)	110.00	
9 at 108.00	972.00	
49 at 120.00	5,880.00	
1 at 210.00	210.00	
266 at 2.00, municipals	532.00	
21 at 1.00, new sets	21.00	
54, free.		
(10,042) Increased capacity	356.50	
		$ 133,883.50
TWO PURPOSE		
1,660 at 10.00	16,600.00	
23 at 5.00 (half fee)	115.00	
4 at 24.00	96.00	
1 at 6.00 (quarter fee)	6.00	
22 at 2.00, new set	44.00	
1, new set. No fee.		
5, free.		
(1,716) Increased capacity and balance fees	31.00	
		$ 16,892.00
CHAUFFEURS		
4,867 at $ 2.00, originals	$ 9,734.00	
1,524 at 1.00, originals (half fee)	1,524.00	
133,185 at 1.00, renewals	133,185.00	
66, originals. Free.		
12, renewals. Free.		
(139,654)		
Previous year fees	172.00	
1934 previous year fees	842.00	
		$ 145,457.00
OPERATORS		
334,335 at $ 1.00, operators	$ 334,335.00	
13,511 at .50, instruction	6,755.50	
23 at 1.00, originals "M.C." operators	23.00	
330 at 1.00, renewals "M.C." operators	330.00	
2, renewals. Free.		
(348,201)		
Previous year fees	204.00	
1934 previous year fees	1,462.00	
1934 previous year "M.C." operators' fees	1.00	
		$ 343,110.50
MOTORCYCLES		
2,004 at $ 3.00	$ 6,012.00	
17 at 1.50 (half fee)	25.50	
107 at 2.00, municipals	214.00	
1 at 1.00, new set	1.00	
126, free.		
(2,255)		$ 6,252.50
TRANSFERS		
15,358 at $ 2.00, passenger cars	$ 30,716.00	
1,339 at 2.00, commercial	2,678.00	
56 at 1.00, motorcycles	56.00	
34 at 2.00, two purpose	68.00	
22 at 2.00, trailers	44.00	
(16,809)		$ 33,562.00
DUPLICATE CARDS		
627 at $ .50, passenger cars	$ 313.50	
129 at .50, commercial	64.50	
7 at .50, motorcycles	3.50	
4 at .50, two purpose	2.00	
10 at .50, trailers	5.00	
238 at .50, passenger car transfer	119.00	
36 at .50, commercial transfer	18.00	
1 at .50, two purpose transfer	.50	
172 at .50, originals chauffeurs	86.00	
1,011 at .50, renewals chauffeurs	505.50	
182 at .50, originals operators	91.00	
1,660 at .50, renewals operators	830.00	

DUPLICATE CARDS—(Continued)			
2 at .50, "M.C." original operators		1.00	
1 at .50, passenger car dealers transfers		.50	
(4,080)			
159 at .50, (1933)		79.50	
2 at .50, (1932)		1.00	
			$ 2,120.50
IN TRANSITS			
6,858 at $ .50		$ 3,429.00	
(6,858)			$ 3,429.00
SEARCHES AND CERTIFICATES			
333 at $ .25		$ 83.25	
41 at .50		20.50	
28 at .75		21.00	
17 at 1.00		17.00	
1 at 1.25		1.25	
5 at 1.50		7.50	
4 at 1.75		7.00	
8 at 2.00		16.00	
2 at 2.25		4.50	
2 at 2.50		5.00	
1 at 2.75		2.75	
2 at 3.00		6.00	
(445) 1 at 4.00		4.00	
			$ 195.75
MISCELLANEOUS			11.85
FINES			12,860.37
LISTS			531.57
PUBLIC VEHICLES			34,211.32
PUBLIC COMMERCIAL VEHICLES			6,148.26
POSTAGE			41.33
TESTING HEADLIGHTS			30.00
EXAMINATION FEES			3,823.00
COMMISSIONS PAID TO AGENTS:			
Passenger cars		58,705.20	
Commercials		7,868.75	
Trailers		1,453.70	
Two purpose		308.25	
Chauffeurs		9,742.20	
Operators and instructions		26,396.85	
Motorcycles		159.30	
Transfers		1,011.65	
In transits		265.85	
			$ 105,911.75
Cartage and Express charges paid by agents			64.76
REFUNDS:			
Passenger cars		385.50	
Commercials		949.50	
Trailers		6.00	
In transits		7.00	
Examination fees		5.00	
Fines		36.00	
Chauffeurs		1.00	
Operators and instruction permits		3.00	
Motorcycles		3.00	
			$ 1,396.00
BALANCES DUES AND OVERPAID:			
Credit from agents			521.10
Less amount overcharged on commercials			47.00
Uncollectable accounts			6.30
Deposited with treasury as shown by treasurer's statement			6,138,807.12
			$6,246,754.03
1933-34 Balances paid	493.94		
Uncollectable accounts	6.30		
Amount overcharged on commercials	47.00		
		547.24	
Previous years fees paid		37.56	
Interest		11.28	
			596.08
		$6,246,157.95	$6,246,157.95

SUMMARY OF REGISTRATION OF MOTOR VEHICLES

By Type and by County

1935

County	Passenger	Commercial	Two-Purpose	Trailer	Motorcycles	Total	Per cent of Total Registrations
Algoma	5,174	873	22	210	42	6,321	1.07
Brant	7,480	1,136	86	547	55	9,304	1.58
Bruce	7,377	552	28	432	19	8,408	1.43
Carleton	21,993	3,066	66	793	264	26,182	4.45
Cochrane–	......	......	.....	......	.....	......	......
Dufferin	2,612	216	8	131	9	2,976	.51
Dundas	2,488	221	12	131	17	2,869	.49
Durham	4,200	381	69	222	24	4,896	.83
Elgin	7,436	835	49	636	58	9,014	1.53
Essex	22,033	3,259	65	1,209	120	26,686	4.54
Frontenac	6,262	973	47	260	69	7,611	1.29
Glengarry	1,953	222	6	67	13	2,261	.38
Grenville	2,493	293	18	85	12	2,901	.49
Grey	8,164	704	43	391	29	9,331	1.59
Haldimand	4,528	477	19	336	18	5,378	.91
Haliburton	666	80	6	31	2	785	.13
Halton	4,969	758	35	254	42	6,058	1.03
Hastings	9,003	1,246	77	755	54	11,135	1.89
Huron	7,498	649	43	305	55	8,550	1.45
Kenora	1,444	579	7	41	20	2,091	.36
Kent	12,171	1,512	51	928	46	14,708	2.50
Lambton	9,558	899	40	729	42	11,268	1.92
Lanark	4,741	449	52	235	25	5,502	.94
Leeds	4,957	755	47	193	34	5,986	1.02
Lennox and Addington	2,994	371	22	182	10	3,579	.61
Lincoln	8,762	1,852	61	431	80	11,186	1.90
Manitoulin	1,075	99	.....	33	5	1,212	.21
Middlesex	20,104	2,480	119	1,276	190	24,169	4.11
Muskoka	2,653	480	16	105	32	3,286	.56
Nipissing	4,395	715	10	127	37	5,284	.90
Norfolk	5,763	808	39	557	54	7,221	1.23
Northumberland	4,470	609	40	281	30	5,430	.92
Ontario	9,358	1,090	52	476	112	11,088	1.88
Oxford	9,040	1,145	88	679	72	11,034	1.88
Parry Sound	2,463	437	17	79	16	3,012	.51
Peel	5,315	914	30	343	53	6,655	1.13
Perth	8,251	803	40	663	72	9,829	1.67
Peterborough	6,375	805	45	334	39	7,598	1.29
Prescott	1,746	215	15	91	15	2,082	.35
Prince Edward	2,874	378	13	214	21	3,500	.59
Rainy River	1,392	322	10	166	7	1,897	.32
Renfrew	5,579	556	19	267	36	6,457	1.10
Russell	1,662	262	9	65	7	2,005	.34
Simcoe	11,640	1,431	77	565	63	13,776	2.34
Stormont	4,032	455	26	146	74	4,733	.80
Sudbury	4,708	946	12	127	27	5,820	.99
Thunder Bay	6,519	1,354	22	212	50	8,157	1.39
Timiskaming–	7,264	1,131	94	231	106	8,826	1.50
Victoria	4,503	456	22	230	19	5,230	.89
Waterloo	13,100	1,620	45	739	166	15,670	2.67
Welland	12,472	1,851	87	603	109	15,122	2.57
Wellington	9,033	943	42	509	48	10,575	1.80
Wentworth	26,118	4,197	72	1,203	240	31,830	5.41
York	126,304	18,472	320	4,235	1,645	150,976	25.67
Foreign	446	258	.....	142	2	848	.14
Total	489,610	67,590	2,370	24,232	4,506	588,308	100.00

–Registrations for Districts of Cochrane and Timiskaming are combined.

DISTRIBUTION OF MOTOR VEHICLES

By City and Type

City	Passenger	Commercial	Two-Purpose	Trailer	Motorcycles	Total	Per cent of Total Registrations
Belleville	2,220	345	25	144	16	2,750	.47
Brantford	4,315	700	36	200	26	5,277	.89
Chatham	2,933	504	9	174	12	3,632	.62
Fort William	2,651	532	7	117	25	3,332	.57
Galt	1,908	247	14	81	17	2,267	.39
Guelph	2,888	447	14	114	13	3,476	.59
Hamilton	21,066	3,083	32	848	192	25,221	4.29
Kingston	3,575	563	11	148	59	4,356	.74
Kitchener	4,123	640	4	188	68	5,023	.85
London	11,952	1,581	27	487	145	14,192	2.41
Niagara Falls	3,716	455	10	149	21	4,351	.74
North Bay	1,708	322	.....	72	13	2,115	.36
Oshawa	3,878	411	13	219	48	4,569	.78
Ottawa	16,973	2,324	24	485	218	20,024	3.40
Owen Sound	1,729	217	10	93	5	2,054	.35
Peterborough	3,179	476	12	160	28	3,855	.66
Port Arthur	2,468	498	9	59	9	3,043	.52
St. Catharines	4,256	753	9	174	33	5,225	.89
St. Thomas	2,525	263	2	119	30	2,939	.50
Sarnia	3,148	325	4	113	21	3,611	.61
Sault Ste. Marie	2,519	415	4	134	23	3,095	.53
Stratford	2,366	298	10	128	35	2,837	.48
Sudbury	2,846	467	5	63	20	3,401	.58
Toronto	108,472	15,524	226	3,355	1,414	128,991	21.92
Welland	1,860	249	9	84	23	2,225	.38
Windsor	9,633	1,531	21	379	85	11,649	1.98
Woodstock	1,733	210	9	62	15	2,029	.34
Total Cities	230,640	33,380	556	8,349	2,614	275,539	46.84
Total Ontario	489,610	67,590	2,370	24,232	4,506	588,308	100.00

REPORT OF FINANCIAL RESPONSIBILITY DIVISION 1935

The compilation of driving records is probably the least known of all the activities of the Motor Vehicles Branch. Drivers, called to account for records showing numerous reports of accidents, reports of convictions, complaints, and other items of operating history, have expressed amazement at the fact that an individual history of each driver was maintained. Such records are, however, essential to any method of driver control and to the advancement of public safety. And since such are the objects of both the drivers' licensing law and the financial responsibility provisions of the Highway Traffic Act, the operating record files are among the most important records of the Department. At the end of 1935 these files, which had been operative since September 1st, 1930, contained records of over 175,000 Ontario drivers against whom in the intervening period of time had been recorded some conviction, accident or complaint.

Of these 175,000 drivers, over 17,485 had been suspended under the provisions of the Financial Responsibility sections of the Highway Traffic Act. The number of suspensions during 1935 totalled 3,547 while during this same year 2,311 drivers were permitted to revive their driving privileges, having complied with the requirements of the law. In addition to the Financial Responsibility suspensions, 1,045 others, imposed by Magistrates, or for offences not mentioned in Part XIII of the Act were made effective by the Department.

While the Act provides three methods for the filing of proof of financial responsibility, in actual practice only one method is used, that is the filing of a certificate of insurance. 1902 suspensions were relieved by the filing of such certificates, 612 of which were founded on policies issued prior to the date of suspension and 1,290 were filed on policies taken out in order to comply with the requirements of the Act. The following tables show the number of Financial Responsibility and other suspensions put into effect during the year 1935 and during the period September 1st, 1930, to December 31st, 1935, and also the number of financial responsibility suspensions relieved during the same periods.

FINANCIAL RESPONSIBILITY SUSPENSIONS

Cause	1935	Total
Reckless driving	1,546	5,839
Speeding	64	185
Racing	.....	9
No driver's license	231	4,132
Criminal negligence	25	165
Other offences	100	434
Unsatisfied judgments	73	323
Policy Cancellations	821	3,175
Fail to remain at accident	155	862
Driving while intoxicated	532	2,361
Totals	3,547	17,485

FINANCIAL RESPONSIBILITY SUSPENSIONS LIFTED

Cause	1935	Total
Reckless driving	950	3,640
Speeding	42	134
Racing	.....	9
No driver's license	99	3,926
Criminal negligence	18	75
Other offences	35	110
Policy cancellations	496	2,045
Unsatisfied judgments	20	84
Fail to remain at accident	103	561
Driving while intoxicated	183	907
Expiry (not classified)	365	474
Totals	2,311	11,965

NON-FINANCIAL RESPONSIBILITY SUSPENSIONS

Cause	1935	Total
Reckless driving	701	3,337
Speeding	71	193
Racing	.....	4
No driver's license	7	11
Criminal negligence	1	4
Other offences	232	389
Unsatisfied judgments	17	31
Fail to remain at accident	5	16
Driving while intoxicated	11	59
Totals	1,045	4,044

REPORT OF ACCIDENT DIVISION

In the following pages there is presented the fifth annual report of the Accident Division which is submitted under the provisions of Section 90 of the Ontario Highway Traffic Act. In addition to the data covering the experience for 1935, comparative figures are shown for the previous four, and, in some cases, five years, and it is believed this additional background of statistical facts will permit a study of the general trends and also, by showing average conditions, give a better understanding of the accident situation in Ontario.

Some of the interesting features divulged by a study of the 1935 statistics are set out below. (Corresponding data for 1934 are shown in parentheses):

Number of accidents reported	10,648	(9,645)
Number of fatal accidents reported	501	(476)
Number of personal injury accidents reported	7,365	(6,763)
Number of property damage only accidents reported	2,782	(2,406)
Number of persons fatally injured	560	(512)
Number of persons non-fatally injured	9,839	(8,990)
Amount of property damage reported	$1,085,084	($942,722)

One person fatally injured every 16 (17) hours.
One person non-fatally injured every 53 (58) minutes.
Ratio of injured to killed, 18 (17) to 1.
Ratio of adults to children (under 15 years) killed........6 (4) to 1.
Ratio of adults to children injured..............3 (3) to 1.
Ratio of males to females fatally injured........3 (3) to 1.
Deaths per 10,000,000 gallons of gasoline consumed......22.8 (21.9).
Deaths per 10,000 vehicles registered......9.5 (9.1).
Deaths per 100,000 (estimated) population......15.6 (14.4).
Ratio of male to female drivers in accidents......14 (15) to 1.
Ratio of male to female drivers in fatal accidents......23 (16) to 1.
Ratio of vehicles registered to vehicles in reported accidents......38 (40) to 1.
Ratio of drivers registered to (Ontario) drivers in reported accidents..49 (51) to 1.

Of the fatal and personal injury accidents reported 66.8 (66.6) per cent. occurred in the seven counties: York, Wentworth, Middlesex, Essex, Carleton, Welland, and Lincoln.

As in previous years, the peak hour for motor vehicle accidents was between 5 and 6 p.m.

The largest number of accidents for any month was recorded in August. Saturday was the peak day.

The average property damage loss per reported accident was $102.00 ($98,00). The corresponding rate per city accident was $56.00 ($52.00); and for accidents on the King's Highways, $181.00 ($172.00).

During 1935, widespread efforts were carried on to make people aware of the motor vehicle accident situation and to educate them to safe and proper behaviour on the highway, in continuation of a safety publicity programme begun in 1927 and conducted each year since that time. Advertisements appeared in all important daily and weekly newspapers and magazines published in the Province, and wide use was made of bill-board displays on main highways. About 25,000 accident bulletins were distributed to the newspapers, traffic officials, police, magistrates and other interested individuals and organizations throughout the Province.

Educational efforts directed to younger children included the distribution of 50,000 'Safety and Danger' Games; and a half-hour radio programme which was broadcast four days a week over a five-month period.

The Department was also able to be of assistance to teachers, school-boards and community groups seeking information or ideas of assistance in promoting and organizing various safety projects. In establishing working relationship with groups of this kind we believe there are splendid opportunities for furthering the cause of safety, since the members frequently have considerable influence in their respective communities and any co-operation the Motor Vehicles Branch may extend by supplying speakers or publicity material can produce lasting results. The co-ordinated efforts of such safety-minded groups throughout the Province will play an important part in supporting the continued and increased application of safe standards in the design and construction of vehicles and highways; in the methods or examination and qualifications required of drivers; high safety standards in the preventive activities of the police, and in the administration of the traffic laws and regulations by our courts. Equally important is the work of such organizations in causing our citizens to recognize their individual responsibility to be safe and to safeguard others.

NATURE OF ACCIDENTS REPORTED— (See Appendix, Table No. 1):

Accidents (involving personal injury or property damage in excess of $50.00) reported during 1935 totalled 10,648 as compared with 9,645 for the previous year—representing a percentage advance of 10.4. 'Fatal' accidents (501) increased by 5.25 per cent.; 'personal injury' accidents (7,365) advanced 8.9 per cent.; and 'property damage only' accidents (2,782) showed a percentage gain of 15.6.

'Fatal' accidents made up 4.7 per cent. of the total reported, while 'personal injury' and 'property damage only' mishaps comprised 69.2 per cent. and 26.1 per cent., respectively.

The combined experience for five years (1931 to 1935) showed 47,339 accidents to have been reported, of which 2,335 (4.9%) were 'fatal' accidents; 32,466 (68.6%) were 'personal injury' accidents; and the remaining 12,538 (26.5%) involved property damage, in excess of $50.00, only.

ACCIDENTS CLASSIFIED BY TYPE OF COLLISION— (See Appendix, Table No. 2a):

Of the 10,648 accidents reported during the year, 4,115 (38.6%) involved collisions between motor vehicles, and 3,195 (30.0%) were of the 'collision with pedestrian' type. An additional 23.7 per cent. of the mishaps was comprised of 'collision with bicycle' accidents, 1,028 (9.7% of total); 'collisions with fixed object', 876 (8.2%); 'non-collision' accidents, 612 (5.8%).

As compared with an increase of 10.4 per cent. in the number of 'all' accidents reported, the 'collision with other motor vehicle' type increased by 9.2 per cent.; the 'collision with pedestrian' type advanced 6.7 per cent.; and the number of collisions with fixed objects showed a percentage gain of 24.1. The greatest increase was in the number of accidents involving collisions between motor vehicles and bicycles which was 24.9 per cent. above the corresponding total for 1934 and 63 per cent. above the average total for the four years, 1931 to 1934.

An examination of the reports of 47,339 accidents covering a five-year period showed that the greatest share (39.1%) involved collisions between motor vehicles; followed by: 'collisions with pedestrians', 31.1 per cent.; collisions with bicycle', 7.5 per cent.; 'collisions with fixed object', 7.0 per cent.; and 'non-collision' accidents, 6.8 per cent. During 1935, collisions with bicycles and collisions with fixed objects were the only types of accident which showed a greater rate of frequency than was indicated by the average five-year experience. These two types increased in number in each year from 1931 to 1935.

FATAL ACCIDENTS CLASSIFIED BY TYPE OF COLLISION (See Appendix, Table No. 2b)

As compared with the increase of 5.25 per cent. in the number of fatal accidents, the 'collision with railroad train' type advanced from 26 fatal mishaps in 1934 to 33 in 1935; and fatal accidents resulting from collisions with fixed objects and with bicycles increased by 34.0 and 12.9 per cent., respectively. Fatal accidents involving pedestrians increased from 211 in 1934 to 224 in 1935; but accidents of this nature resulting from collisions between motor vehicles decreased from 76 in 1934 to 65 in 1935.

While, as pointed out in the previous Section, 31.1 per cent. of the accidents during a five-year period involved collisions with pedestrians, a study of fatal accidents during that time showed 46.4 per cent. to be of this type of collision. On the other hand, the 'collision with other motor vehicle' type which accounted for 39.1 per cent. of 'all' accidents, made up only 13.6 per cent. of the 2,335 fatal accidents during the five years. The 'non-collision' (running off roadway, overturning, etc.) type of accident made up 12.5 per cent. of the fatal cases, followed by collisions with fixed objects and with bicycles with 8.6 and 5.9 per cent., respectively. The indisputable seriousness of 'motor vehicle—railroad train' collisions is indicated by the fact that this type of accident, which made up 1.2 per cent. of 'all' accidents, resulted in 6.9 per cent. of the fatal mishaps during the five years.

URBAN ACCIDENTS CLASSIFIED BY TYPE OF COLLISION (See Appendix, Table No.3a)

Accidents on 'urban' (city, town and village) streets accounted for 6,510 (61.1%) of the 10,648 accidents reported during 1935. This total (6,510) was 12.4 per cent. more than the 'urban' total for 1934, hence slightly above the (10.4%) advance in 'all' accidents noted during 1935.

As compared with this 12.4 per cent. increase in all 'urban' accidents, 'collision with bicycle' mishaps advanced (from 1934) by 29.0 per cent; the 'collision with fixed object' type increased by 26.4 per cent.; and collisions with other motor vehicles and with pedestrians showed gains of 12.9 and 5.9 per cent., respectively.

The combined experience, covering four years, showed that of 23,091 urban accidents, 91.09 per cent. were included under the four following classifications: 'collision with pedestrian', 42.34 per cent.; 'collision with other motor vehicle', 33.00 per cent.; 'collision with bicycle', 11.23 per cent.; and 'collision with fixed object', 4.52 per cent.

URBAN FATAL ACCIDENTS CLASSIFIED BY TYPE OF COLLISION
(See Appendix, Table No. 3b):

Fatal accidents on 'urban' streets during 1935 totalled 194 or 38.7 per cent. of the 501 reported in Ontario. There was no change in this item from the corresponding total for 1934, but urban fatal accidents involving 'collision with railroad train', increased from 7 in 1934 to 12 in 1935; 'collision with fixed object' advanced from 8 to 14; and the 'collision with bicycle' type (17) was 2 above the total for the previous year. The latter two totals were higher than in any other year for which records are available.

During the four years (1932-1935) there were 731 fatal accidents on 'urban' streets or 40.4 per cent. of all fatal mishaps reported. Of these 731 cases, 477 or 65.2 per cent. were of the 'collision with pedestrian' type; 53 (7.3%) involved collisions between motor vehicles; and the same number (53) resulted from collisions between motor vehicles and bicycles.

Over 57 per cent. (57.4%) of all fatal accidents involving collisions with pedestrians, and 44.5 per cent. of the 'collision with bicycle' type occurred on the 'urban' streets while only 21.1 per cent. of the fatal 'motor vehicle vs motor vehicle' mishaps took place at such location.

RURAL ACCIDENTS CLASSIFIED BY TYPE OF COLLISION

(See Appendix, Table No. 4a)

As compared with the advance of 10.4 per cent. in the number of 'all' accidents reported during 1935, 'rural' (King's highway, county road and township road) accidents (totalling 4,138 or 38.9% of total) increased by 7.4 per cent.

The 'collision with fixed object' type of mishap totalled 546 and showed the greatest rate of increase (22.7%) from 1934; followed by the 'collision with pedestrian' class of accident with an advance of 11.1 per cent.

A study of the four-year (1932-1935) experience, covering 15,007 accidents (39.4% of 'all' accidents) showed the largest share (47.1%) classified as collisions between motor vehicles. 'Non-collision' accidents accounted for 2,328 or 15.5 per cent. of the total; and collisions with fixed objects and with pedestrians 11.9 per cent. and 12.9 per cent., respectively.

RURAL FATAL ACCIDENTS CLASSIFIED BY TYPE OF COLLISION

(See Appendix, Table No. 4b)

Fatal accidents on the 'rural' (King's highway, county and township) roads during 1935 numbered 307 or 61.3 per cent. of the Ontario total—representing an increase of 8.9 per cent. from the corresponding figure for 1934.

As compared with the 8.9 per cent. advance, the 'collision with pedestrian' type resulted in 26 (31.7%) more fatal accidents than in 1934 and the 'collision with fixed object' type increased by 25.6 per cent.

The greater seriousness of 'rural' accidents is indicated by the fact that while 39.4 per cent. of 'all' accidents during the four years were of this class, they accounted for 59.6 per cent. of the fatal mishaps. Rural accidents of the 'collision with pedestrian' type made up 16.5 per cent. of all mishaps of this class reported but 42.6 per cent. of the fatal pedestrian accidents.

Rural accidents involving collisions between motor vehicles made up 48.1 per cent. of 'all' accidents but 78.9 per cent. of the fatal mishaps of this type happened on the rural roads.

Of the 1,079 fatal 'rural' accidents which occurred in the four years, 354 (32.8%) involved collisions with pedestrians; 18.3 per cent. were 'collision with other motor vehicle' accidents; and 'non-collision' and 'collision with fixed object' accidents made up 18.2 and 12.1 per cent. of the total.

ALL ACCIDENTS DETAILED ACCORDING TO LOCATION (See Appendix, Table No. 5a)

More than half (55.3%) of the 10,648 accidents reported during 1935 took place in the incorporated cities of the Province; and 24.3 per cent. occurred on the King's highways (main Government highways in South Ontario). Ten per cent. of the accidents happened on 'county roads'—which include the main roads of Northern Ontario.

As compared with the 10.4 per cent. advance in all mishaps reported, 'county road' accidents increased by 17.9 per cent.; and 'city' accidents showed a gain of 13.4 per cent. from the coresponding total for 1934.

Over the four-year (1932-1935) period, 38,098 accidents were reported and of these 20,856 (54.7%) occurred in cities; 9,857 (25.9%) took place on the 'King's highways'; and 3,377 or 8.9 per cent. were 'county road' accidents.

FATAL ACCIDENTS DETAILED ACCORDING TO LOCATION

(See Appendix, Table No. 5b)

Of the 501 fatal accidents reported during the year, 170 (33.9%) occurred on the 'King's highways'; 144 (28.7%) took place in cities; and 99 (19.8%) on the 'county roads'.

Four-year experience showed that 32.9 per cent. of the 1,810 fatal accidents happened on the 'King's highways'; 29.4 per cent. in the cities; and 337 (18.6%) on the 'county roads'.

The greater seriousness of rural accidents is indicated by the following 'fatal rates' (number of fatal accidents per hundred accidents reported) for various locations: King's highways, 6.0; county roads, 10.0; cities, 2.5.

ROAD LOCATION AT WHICH ACCIDENTS OCCURRED—(See Appendix, Table No. 6a):

Of the 10,648 accidents during 1935, more than a third (34.16%) took place at street intersections; 25.4 per cent. occurred between street intersections; 21.77 per cent. happened on the rural 'straight road'; and 6.19 per cent. on curves.

Accidents at street intersections showed the greatest (16.1%) advance during the year.

ROAD LOCATION AT WHICH FATAL ACCIDENTS OCCURRED

(See Appendix, Table No. 6b)

The locations of almost 80 per cent. of the 501 fatal accidents were classified under four headings: rural straight road, 182 (36.3%): between street intersections, 100 (20.0%); at street intersections, 76 (15.2%); on curve, 42 (8.4%).

While most (33.22%) of the 17,339 accidents during the five years took place at street intersections only 15.2 per cent. of the fatal mishaps occurred at this location; while 'between intersection' accidents accounted for 25.43 per cent. of all accidents but 20.7 per cent. of the fatal cases.

Accidents on the rural straight road made up 22.55 per cent. of all accidents and 34.8 per cent. of fatal accidents.

Of 151 accidents at unguarded railroad crossings, 122 resulted in one or more deaths.

ALL ACCIDENTS CLASSIFIED ACCORDING TO LIGHT CONDITIONS PREVAILING (See Appendix, Table No. 7a):

Most (55.2%) of the motor vehicle accidents during 1935 occurred during daylight. Night accidents made up 40.5 per cent. of the total (10,648) reported, and those during dusk or dawn comprised 4.3 per cent.

The five-year study showed the following distribution of accidents: daylight, 56.2 per cent.; dark, 38.0 per cent.; dusk, 5.8 per cent.

FATAL ACCIDENTS CLASSIFIED ACCORDING TO LIGHT CONDITIONS PREVAILING (See Appendix, Table No. 7b):

Most (52.9%) of the fatal accidents in 1935 happened during dark (48.3%) or dusk (4.6%). Daylight accidents made up 47.1 per cent. of the total.

Despite the increase in all fatal accidents amounting to 5.25 per cent., daylight mishaps of this nature decreased from 247 in 1934 to 236 in 1935. The number of fatal accidents during darkness (242) was the highest on record and 22.8 per cent. above the corresponding figure for last year.

Of every 100 accidents reported during the five years, 4.9 were fatal. The corresponding percentages under various conditions of light were as follows: Daylight, 4.5; dusk, 5.9; dark, 5.4.

In considering these data it should be remembered that as the volume of traffic during dusk or darkness is considerably less than in daylight, the foregoing rates therefore do not give a complete picture of the increased hazard of night driving.

ALL ACCIDENTS BY HOUR OF OCCURRENCE— (See Appendix, Table No. 8a):

As in each of the previous four years, accidents during 1935 reached their peak between 5 and 6 p.m.

The greatest advance in accidents over 1934 was between the hours 8 a.m. to 5 p.m. with a percentage increase of 14.0 as compared with an increase of 10.4 per cent. for all accidents.

The five-year study showed 44.5 per cent. of the accidents to have occurred during the six hours, 4 to 10 p.m., and 28.2 per cent. in the six-hour period, 10 a.m. to 4 p.m.

FATAL ACCIDENTS BY HOUR OF OCCURRENCE— (See Appendix, Table No. 8b):

The peak hour for fatal accidents during 1935 was between 8 and 9 p.m. although the hours 6 to 7 and 7 to 8 each showed a higher total of fatal accidents than 5 to 6 p.m., the peak hour for all accidents.

The greatest increase in any hour group was between 11 p.m. and 4 a.m. with an advance of 26.0 per cent. as compared with an advance of 5.25 per cent. in all fatal accidents reported.

Of the 2,335 fatal mishaps which occurred during the five years, 1931 to 1935, 45.8 per cent. happened between 4 and 10 p.m. and 24.8 per cent. during the six hours 10 a.m. to 4 p.n.

ALL ACCIDENTS BY DAY OF OCCURENCE— (See Appendix, Table No. 9a):

More motor vehicle accidents occurred during 1935 on Saturdays than on any other day of the week. The total on this day made up 20.4 per cent. of all (10,648) mishaps reported. Friday, Monday and Sunday followed with 15.1, 13.4, and 12.7 per cent. of the total, respectively. The five-year study also showed the peak days for accidents in this order. More than 61 per cent. of the total accidents happened during the 4-day period, Friday to Monday.

FATAL ACCIDENTS BY DAY OF THE WEEK— (See Appendix, Table No. 9b):

Fatal accidents on Sunday made up a larger (17.0%) share of the total than in any other year for which data are available. More than a fifth (20.3%) of the fatal mishaps happened on Saturday.

The combined five-year experience also showed Saturday to be the peak day for fatal accidents with Sunday second in order of number. The 'fatal accident' rate, however, was higher on Sunday than on any other day.

SEX OF DRIVERS INVOLVED IN ALL ACCIDENTS— (See Appendix, Table No. 10a)

The number of drivers (15,111) involved in reported accidents during 1935 was 10.0 per cent. above the corresponding total for the previous year. Male operators, who made up 93.3 per cent. of the total, advanced in number by 9.5 per cent.; females by 18.2 per cent.

Of 67,375 drivers in accidents during the five-year period, 63,032 or 93.5% were male. In the absence of several important factors, however, this ratio cannot be taken to measure the relative driving dependability of the two sexes.

SEX OF DRIVERS INVOLVED IN FATAL ACCIDENTS—(See Appendix, Table No. 10b):

In contrast to the increase in the number of female operators in all accidents, and despite the increase in the number of drivers in fatal mishaps, the number of female drivers in fatal accidents was less than in any of the previous four years. Of the 579 operators in fatal accidents 95.9 per cent. were males.

Of every 100 drivers in accidents during the five years, 4 were in fatal accidents. The corresponding 'fatal rate' for male operators was 4.1, and for females, 3.2.

DRIVERS IN ALL ACCIDENTS, DETAILED BY AGE GROUP (See Appendix, Table No. 11a)

Over 90 per cent. (90.9%) of the drivers in accidents during 1935 were between 18 and 54 years of age. Drivers between 25 and 40 years accounted for 45.5 per cent. of the total, while drivers between 18 and 24 years and 41 to 54 years comprised 23.3 and 22.1 per cent., respectively.

The five-year study showed virtually the same distribution—45.1 per cent. in age class 25 to 40 years; 23.7 per cent. between 18 and 24 years; and 21.8 per cent. were in age group 41 to 54 years.

DRIVERS IN FATAL ACCIDENTS, DETAILED BY AGE GROUP
(See Appendix, Table No. 11b):

Of the 2,709 drivers involved in fatal accidents during 1935, the largest number, 237 (42.5%) were in the age group '25 to 40 years'; 25.6 per cent. were between 18 and 24 years; and 22.4 per cent. were between 41 and 54 years of age.

During the five-year period, of every 100 operators in accidents, 4 were in fatal accidents. The corresponding 'fatal rates' by age groups were as follows:

Under 18 years	3.8
18 — 24 "	4.8
25 — 40 "	4.1
41 — 54 "	4.2
55 — 64 "	4.7
65 years and over	5.7

The highest fatal accident experience was in the age group 65 years and over with a rate 42.5 per cent. above average; and drivers in the age group 18–24 years showed the next worse fatal accident experience with a rate 20.0 per cent. above the average for all drivers.

OPERATING EXPERIENCE OF DRIVERS IN ALL ACCIDENTS
(See Appendix, Table No. 12a):

Four-fifths (80.2%) of the drivers in accidents during 1935 claimed a driving experience of five years of more; and an additional 17.2 per cent. had from one to four year's experience behind the wheel.

A study of 67,379 cases showed 3.0 per cent. of the drivers in accidents to have had less than one year's experience.

OPERATING EXPERIENCE OF DRIVERS IN FATAL ACCIDENTS
(See Appendix, Table No. 12b):

Drivers of 5 or more years experience made up 81.7 per cent. of the drivers in fatal accidents during 1935; and those of from one to four years experience comprised 16.0 per cent. of the total.

The 'fatal accident rate' (number of drivers in fatal accidents per hundred in all accidents) in various 'experience groups', as shown by the five-year study, is shown below:

Less than 3 months experience	4.6
3 to 6 " "	2.7
6 to 12 " "	4.8
1 to 4 years "	3.8
5 years and over	3.8
All drivers	4.0

It will be noticed that the ratio of drivers, with less than three month's experience, in fatal accidents for every 100 in all accidents was 21.1 per cent. higher than the corresponding rate for drivers with 5 or more year's experience.

CONDITION OF DRIVERS INVOLVED IN ACCIDENTS—(See Appendix, Table No. 13a):

The condition of 1.1 per cent. of the drivers involved in accidents during 1935 was stated as intoxicated; 0.3 per cent. were suffering from some physical defect; 1.0 per cent. were operating while under extreme fatigue; and 97.6 per cent. were classified as normal.

CONDITION OF DRIVERS INVOLVED IN FATAL ACCIDENTS
(See Appendix, Table No. 13b):

The number of intoxicated drivers in fatal accidents (8) during 1935 was lower than in any of the previous four years. During the five-year period 1.1 per cent. of the operators in all accidents and 2.2 per cent. of those in fatal mishaps were classified as intoxicated.

TYPES OF VEHICLES INVOLVED IN ACCIDENTS—(See Appendix, Table No. 14a):

Vehicles involved in accidents during 1935 totalled 15,645 or 10.1 per cent. above the total for 1934. Passenger cars which made up 80.0 per cent. of the total advanced by 11.3 per cent.; and commercial vehicles showed a percentage increase of 8.2. During 1935, 83.2 per cent. of motor vehicles registered were passenger cars.

Of 70,010 vehicles in accidents in the five years, 80.1% were passenger cars, 15.4 per cent. were classified as commercial vehicles.

TYPES OF VEHICLES INVOLVED IN FATAL ACCIDENTS—(See Appendix, Table No. 14b):

Six hundred and seven (607) vehicles were in fatal accidents during the year as compared with 587 in 1934. As compared with this 3.4 per cent. advance, the number of passenger cars (464) in fatal mishaps increased by 12.6 per cent.; and commercial vehicles (118) showed a decrease of 21.3 per cent. from the corresponding total for 1934.

Of 2,843 vehicles in fatal accidents during the five-year period, 2,114 (75.1%) were passenger cars, and 572 (20.3%) were classified as commercial vehicles.

NUMBER OF PERSONS FATALLY INJURED— (See Appendix, Table No. 15a):

Five hundred and sixty (560) persons suffered fatal injuries in the 501 fatal accidents reported during 1935, as compared with 512 deaths during the previous year.

Fatalities from motor vehicle accidents in the incorporated cities, towns and villages totalled 204 as compared with 205 in 1934; while deaths from rural (King's highways, county and township road) accidents increased from 307 in 1934 to 356 in 1935.

The fatalities, by more specific locations, were distributed as follows:

Location	No. of Deaths			
	1934		1935	
	No.	%	No.	%
Cities	157	30.7	149	26.6
Towns	41	8.0	43	7.7
Villages	7	1.4	12	2.1
King's Highways	159	31.0	195	34.8
County Roads	97	18.9	108	19.3
Township Roads	51	10.0	53	9.5
Total	512	100.0	560	100.0

As compared with an increase from 1934 of 9.4 per cent. in all fatalities; there was a decrease of 12.8 per cent. in the number of children (under 15 years) fatally injured. There was an increase of 6.6 per cent. in the number killed in the 'collision with pedestrian' type of accident but a decrease of 15.4 per cent. in the number of children fatally injured in such accidents.

'Multiple-death' accidents (in which two or more persons were fatally injured) accounted for 8.0 per cent. of the fatal accidents and 17.7 per cent. of the fatal injuries. There were 461 accidents in which 1 person was fatally injured in each case; 29 accidents in which 2 persons were killed; 9 accidents each of which resulted in 3 deaths; 1 mishap which claimed 4 lives; and a 'collision with railroad train' accident in Thunder Bay District which resulted in 10 deaths.

In 1934 'Multiple-death' accidents made up 6.1 per cent. of the total and accounted for 12.7 per cent. of the deaths.

About 9 of every 10 deaths (88.6%) resulted from five types of accident: collision with pedestrian, 40.2 per cent.; collision with other motor vehicle, 14.5 per cent.; collision with fixed object, 12.3 per cent.; collision with railroad train, 11.1 per cent.; and non-collision accidents, 10.5 per cent.

The number and percentage distribution of the fatalities, according to various age groups, are shown below. The experience for 1935, 1934 and for the four-year period, 1932-1935, is presented to permit comparison:

Age Group	No. of Deaths					
	1935		1934		4-year period	
	No.	%	No.	%	No.	%
0— 4 years	30	5.3	25	4.9	115	5.8
5—14 "	52	9.3	69	13.5	235	11.9
15—35 "	179	32.0	162	31.6	636	32.2
36—54 "	151	27.0	117	22.9	444	22.5
55—64 "	72	12.8	59	11.5	228	11.5
65 years and over	76	13.6	80	15.6	319	16.1
Total	560	100.0	512	100.0	1977	100.0

The 'collision with pedestrian' type of accident, which in the four years accounted for 42.3 per cent. of the fatalities was responsible for most of the fatal injuries to children. In the age group 0-4 years 98 (85.3%) of the 115 deaths resulted from this type of mishap. The corresponding percentages for other age groups were as follows: 5 to 14 years, 76.2 per cent.; 15 to 35 years, 15.9 per cent.; 36 to 54 years, 32.2 per cent.; 55 to 64 years, 45.2 per cent.; 65 years and over, 66.5 per cent. It will be noticed that the pedestrian class of mishap accounted for a larger share of the deaths among the young and the aged than was the case in the 'between age' groups.

On the other hand, persons in the age groups '15 to 35 years' (which group accounted for 32.2 per cent. of the total fatalities) made up 42.0 per cent. of the deaths arising from collisions between motor vehicles, 48.9 per cent. of the deaths resulting from collisions with fixed objects, and 50.2 of the fatalities resulting from non-collision accidents. In other words, this group accounted for a larger than average share of the deaths from accidents which, in the majority of cases, result from driving at high speeds.

NUMBER OF PERSONS NON-FATALLY INJURED—(See Appendix, Table No. 15b):

Nine thousand eight hundred and thirty-nine (9,839) persons suffered non-fatal injuries in motor vehicle accidents in Ontario during 1935 as compared with 8,990 for the previous year—representing a percentage increase of 9.4.

The number and percentage distribution of the injured, by location, is shown below:

Location	No. of Persons Injured 1934 No.	%	1935 No.	%
Cities	4654	51.7	5102	51.8
Towns	474	5.3	461	4.7
Villages	82	.9	138	1.4
King's Highways	2380	26.5	2562	26.0
County Roads	951	10.6	1087	11.1
Township Roads	449	5.0	489	5.0
Total	8990	100.0	9839	100.0

The number and percentage distribution of the injured by age group is shown in the following table:

Age Group	Non-fatal Injuries 1935 No.	%	1934 No.	%	4-year Total No.	%
0— 4 years	501	5.5	437	5.3	1809	5.7
5—14 "	1594	17.4	1480	18.0	5873	18.4
15—35 "	3806	41.6	3414	41.4	13066	41.0
36—54 "	2145	23.4	1891	23.0	7284	22.9
55—64 "	633	6.9	566	6.9	2160	6.8
65 years and over	481	5.2	448	5.4	1662	5.2
Not stated	679	....	754	....	3083	....
Total	9839	100.0	8990	100.0	34937	100.0

It will be noticed that the share of total injuries to children during 1935 was less than the corresponding percentage for the four-year period.

Collision with bicycle and collision with fixed object accidents showed the greatest increase in injuries during 1935, although 'collision with other motor vehicle' and collision with pedestrian accidents together accounted for more than two-thirds (67.2%) of the total reported.

The four-year experience showed that 32.0 per cent. of the injuries resulted from collisions between motor vehicles and pedestrians, while 80.6 per cent. of the injuries to children between 0 and 4 years, and 71.2 per cent. of the injuries in the age group 5 to 14 years resulted from mishaps of this type. Of the persons in the age group 15 to 35 years (which group made up 41.0% of the total) only 14.2 per cent. of the injuries resulted from pedestrian accidents and 40.9 per cent. were the result of collisions between motor vehicles.

CLASSIFICATION OF PERSONS FATALLY INJURED—(See Appendix, Table No. 16a):

Out of 560 persons killed during the year, 227 (40.5%) were pedestrians; 175 (31.3%) were motor vehicle passengers; and 102 (18.2%) were drivers. The number of bicyclists killed (36) was higher than in any previous year on record.

The classification of the 560 persons killed, by various locations, is shown below:

Location	Drivers	Passengers	Pedestrians	Bicyclists	All Others	Total
Cities	12	26	92	12	7	149
Towns	7	11	18	5	2	43
Villages	3	2	7	..	..	12
King's Highways	47	72	58	13	5	195
County Roads	24	32	41	5	6	108
Township Roads	9	32	11	1	..	53
Total	102	175	227	36	20	560

From the above table it will be seen that 92 or 61.7 per cent. of the persons killed on city streets were pedestrians, 17.4 per cent. were passengers in motor vehicles, and 12 (8.0%) were bicyclists, and an equal share were drivers of motor vehicles. On the King's Highways, a smaller proportion (29.7%) were pedestrians, whereas passengers and drivers made up 36.9 per cent. and 24.1 per cent. of the total, respectively. It will be noticed that there were 13 bicyclists killed on the King's Highways as compared with 12 in 'all cities'.

CLASSIFICATION OF PERSONS NON-FATALLY INJURED (See Appendix, Table No. 16b)

Of the 9,839 persons injured during the year, 35.5 per cent. were passengers, 32.3 per cent. were pedestrians and 1,021 (10.4%) were bicyclists. The latter total was higher than for any previous year on record and 24.2 per cent. above the corresponding total for 1934.

The classification of victims non-fatally injured, according to the various locations, is shown in the following table:

Location	Drivers	Passengers	Pedestrians	Bicyclists	All Others	Total
Cities	527	1018	2516	836	205	5102
Towns	82	187	142	36	14	461
Villages	23	65	29	13	8	138
King's Highways	753	1440	224	55	90	2562
County Roads	300	602	123	36	26	1087
Township Roads	97	180	145	45	22	489
Total	1782	3492	3179	1021	365	9839

Of the total injured, 3,179 or 32.3 per cent. were pedestrians, whereas 49.3 per cent. of those injured in city accidents were so classified.

The more serious results from higher speeds, is indicated by the large share of drivers and passengers injured in rural accidents. It will be seen that King's Highway accidents accounted for 42.3 per cent. of the injuries to drivers and 41.2 per cent. of the injuries to passengers but only 26.0 per cent. of all the injuries reported resulted from accidents on such roads.

CLASSIFICATION OF PERSONS FATALLY INJURED IN URBAN AND RURAL ACCIDENTS—(See Appendix, Tables Nos. 16c and 16d):

As compared with the 9.4 per cent. advance in all fatalities during 1935, fatal injuries from urban accidents decreased by one (205 in 1934 and 204 in 1935). Rural fatalities (356) were 49 or 16.0 per cent. above the corresponding total for 1934.

The increase in the number of passengers fatally injured, in both urban and rural accidents, will be observed. (See appendix.)

In considering the four-year (1932-1935) experience it was found that of the 1,977 deaths, 766 (38.7%) resulted from urban (city, town and village) accidents and 1,211 or 61.3 per cent. from accidents on the King's Highways, county roads and township roads.

Pedestrians made up 63.8 per cent. of the persons fatally injured on urban streets, and 29.6 per cent. of the rural total.

Drivers and passengers comprised 11.9 per cent. and 14.4 per cent. of the urban total, and 23.5 per cent. and 37.2 per cent. of the fatalities resulting from rural mishaps.

CLASSIFICATION OF PERSONS NON-FATALLY INJURED IN URBAN AND RURAL ACCIDENTS—(See Appendix, Tables Nos. 16e and 16f):

The number of persons injured in urban mishaps (5,701) increased by 9.4 per cent., while those resulting from rural mishaps were 9.2 per cent. above the corresponding total for 1934.

Of 34,937 non-fatal injuries reported during the four-year period, 20,096 (57.5%) resulted from urban (city, town and village) accidents. Almost half (48.7%) of those injured in such mishaps were pedestrians, 22.9 per cent. were passengers in motor vehicles, and 12.9 per cent. were bicyclists. The analysis of the results of rural accidents showed a very different distribution. More than half (53.6%) of those injured in such mishaps were passengers, 27.5 per cent. were drivers, 11.8 per cent. were pedestrians, and 3.2 per cent. were bicyclists.

NUMBER OF DEATHS PER HUNDRED PERSONS NON-FATALLY INJURED (See Appendix, Table No. 16g):

This table has been prepared to show the relative hazard of rural and urban accidents.

In considering the experience for the past four years (1932 to 1935) it was found that there were 5.7 deaths for every 100 non-fatal injuries reported in Ontario. In urban accidents the rate was 3.8—or 50.0 per cent. below the average rate, whereas the rate for rural accidents (8.2) was 44.0 per cent. above the average.

The fatal rate in city accidents was 3 per hundred non-fatal injuries as compared with a rate of 6.9 in King's Highway mishaps. There were more than 23 pedestrians killed for every 100 non-fatally injured in King's Highways mishaps while the corresponding rate for city accidents was 4 deaths per hundred injured. The greater severity of rural accidents was indicated by all classifications (See appendix).

MOTOR VEHICLE ACCIDENT STATISTICS

APPENDIX

NATURE OF ACCIDENTS REPORTED

Table 1.

	1931	1932	1933	1934	1935	Total	Per Cent of Total
Fatal	525	461	372	476	501	2,335	4.9
Personal injury	6,191	6,182	5,965	6,763	7,365	32,466	68.6
Property damage only	2,525	2,528	2,297	2,406	2,782	12,538	26.5
Total	9,241	9,171	8,634	9,645	10,648	47,339	100.0

ALL ACCIDENTS CLASSIFIED ACCORDING TO TYPE OF COLLISION

Table 2 (a).

	1931	1932	1933	1934	1935	Total	Per Cent of Total
Collision with pedestrian	2,989	2,826	2,697	2,994	3,195	14,701	31.1
Collision with other automobile	3,829	3,555	3,243	3,767	4,115	18,509	39.1
Collision with horse drawn vehicle	238	247	193	201	213	1,092	2.3
Collision with R.R. train	152	118	91	101	118	580	1.2
Collision with street car	218	229	176	175	202	1,000	2.1
Collision with other vehicles	10	18	9	14	11	62	.1
Collision with fixed object	455	596	653	706	876	3,286	7.0
Collision with bicycle	448	596	660	823	1,028	3,555	7.5
Collision with motorcycle	187	190	177	159	173	886	1.9
Non-collision accident	656	703	648	615	612	3,234	6.8
Miscellaneous	59	93	87	90	105	434	.9
Total	9,241	9,171	8,634	9,645	10,648	47,339	100.0

FATAL ACCIDENTS CLASSIFIED ACCORDING TO TYPE OF COLLISION

Table 2 (b).

	1931	1932	1933	1934	1935	Total	Per Cent of Total
Collision with pedestrian	252	226	170	211	224	1,083	46.4
Collision with other automobile	67	60	50	76	65	318	13.6
Collision with horse drawn vehicle	11	7	7	6	9	40	1.7
Collision with R.R. train	43	35	25	26	33	162	6.9
Collision with street car	11	11	5	8	10	45	1.9
Collision with other vehicles	.....	1	1	2	1	5	.2
Collision with fixed object	35	34	22	47	63	201	8.6
Collision with bicycle	18	28	25	31	35	137	5.9
Collision with motorcycle	10	9	5	7	7	38	1.6
Non-collision accident	73	44	59	61	54	291	12.5
Miscellaneous	5	6	3	1	......	15	.7
Total	525	461	372	476	501	2,335	100.0

URBAN* ACCIDENTS CLASSIFIED ACCORDING TO TYPE OF COLLISION

Table 3 (a).

	1932	1933	1934	1935	Total	Per Cent of Total
Collision with pedestrian	2,362	2,255	2,506	2,653	9,776	42.34
Collision with other automobile	1,910	1,743	1,863	2,104	7,620	33.00
Collision with horse drawn vehicle	102	71	75	94	342	1.48
Collision with R.R. train	57	46	45	57	205	.89
Collision with street car	206	161	165	185	717	3.10
Collision with other vehicles	1	2	1	2	6	.03
Collision with fixed object	220	232	261	330	1,043	4.52
Collision with bicycle	497	532	683	881	2,593	11.23
Collision with motorcycle	144	123	121	129	517	2.24
Non-collision accident	57	49	71	73	250	1.08
Miscellaneous	15	4	1	2	22	.09
Total	5,571	5,218	5,792	6,510	23,091	100.00

*'Urban' accidents include those which occurred on city, town or village streets.

URBAN FATAL ACCIDENTS CLASSIFIED ACCORDING TO TYPE OF COLLISION

Table 3(b).	1932	1933	1934	1935	Total	Per Cent of Total
Collision with pedestrian........	137	95	129	116	477	65.2
Collision with other automobile..	12	10	16	15	53	7.3
Collision with horse drawn vehicle	1	1	.....	4	6	.8
Collision with R.R. train........	10	11	7	12	40	5.5
Collision with street car.........	7	5	8	8	28	3.8
Collision with other vehicles.....	.....	.....	.....	......	......	.....
Collision with fixed object.......	5	8	8	14	35	4.8
Collision with bicycle...........	10	11	15	17	53	7.3
Collision with motorcycle.......	5	1	4	3	13	1.8
Non-collision accident..........	3	7	7	5	22	3.0
Miscellaneous..................	3	1	.....	......	4	.5
Total.........................	193	150	194	194	731	100.0

RURAL* ACCIDENTS CLASSIFIED ACCORDING TO TYPE OF COLLISION

Table 4(a).	1932	1933	1934	1935	Total	Per Cent of Total
Collision with pedestrian........	464	442	488	542	1,936	12.9
Collision with other automobile..	1,645	1,500	1,904	2,011	7,060	47.1
Collision with horse drawn vehicle	145	122	126	119	512	3.4
Collision with R.R. train........	61	45	56	61	223	1.5
Collision with street car.........	23	15	10	17	65	.4
Collision with other vehicles.....	17	7	13	9	46	.3
Collision with fixed object.......	376	421	445	546	1,788	11.9
Collision with bicycle...........	99	128	140	147	514	3.4
Collision with motorcycle.......	46	54	38	44	182	1.2
Non-collision accident..........	646	599	544	539	2,328	15.5
Miscellaneous..................	78	83	89	103	353	2.4
Total.........................	3,600	3,416	3,853	4,138	15,007	100.0

*Accidents on the King's highways, county roads and township roads are classified as 'rural'.

RURAL FATAL ACCIDENTS CLASSIFIED ACCORDING TO TYPE OF COLLISION

Table 4(b).	1932	1933	1934	1935	Total	Per Cent of Total
Collision with pedestrian........	89	75	82	108	354	32.8
Collision with other automobile..	48	40	60	50	198	18.3
Collision with horse drawn vehicle	6	6	6	5	23	2.1
Collision with R.R. train........	25	14	19	21	79	7.3
Collision with street car.........	4	.....	.....	2	6	.6
Collision with other vehicles.....	1	1	2	1	5	.5
Collision with fixed object.......	29	14	39	49	131	12.1
Collision with bicycle...........	18	14	16	18	66	6.1
Collision with motorcycle.......	4	4	3	4	15	1.4
Non-collision accident..........	41	52	54	49	196	18.2
Miscellaneous..................	3	2	1	......	6	.6
Total.........................	268	222	282	307	1,079	100.0

ALL ACCIDENTS DETAILED ACCORDING TO LOCATION

Table 5(a).	1932	1933	1934	1935	Total	Per Cent of Total
Cities.........................	5,009	4,757	5,196	5,894	20,856	54.7
Towns.........................	453	374	496	498	1,821	4.8
Villages.......................	109	87	100	118	414	1.0
King's highways...............	2,447	2,318	2,512	2,580	9,857	25.9
County roads..................	748	655	906	1,068	3,377	8.9
Township roads................	405	443	435	490	1,773	4.7
Total.........................	9,171	8,634	9,645	10,648	38,098	100.0

FATAL ACCIDENTS DETAILED ACCORDING TO LOCATION

Table 5(b).	1932	1933	1934	1935	Total	Per Cent of Total
Cities	135	105	148	144	532	29.4
Towns	43	37	39	39	158	8.7
Villages	15	8	7	11	41	2.3
King's highways	150	126	149	170	595	32.9
County roads	86	61	91	99	337	18.6
Township roads	32	35	42	38	147	8.1
Total	461	372	476	501	1,810	100.0

ROAD LOCATION AT WHICH ACCIDENTS OCCURRED

Table 6(a).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Street intersection	3,085	3,017	2,856	3,133	3,638	15,729	33.22
Between street intersections	2,442	2,237	2,173	2,475	2,712	12,039	25.43
Rural intersection	358	350	369	346	385	1,808	3.82
Straight road	2,103	2,139	1,903	2,211	2,318	10,674	22.55
Private driveway	239	256	301	316	348	1,460	3.08
Curve	465	527	511	588	659	2,750	5.81
Hill	277	439	373	413	383	1,885	3.99
R.R. crossing (a) Man on duty or gates	11	7	5	9	12	44	.09
R.R. crossing (b) Automatic signal	31	27	18	20	20	116	.25
R.R. crossing (c) Unguarded	115	90	79	76	91	451	.95
Bridge	115	82	46	58	79	380	.80
On ferry or dock	.....	.....	.....	.....	3	3	.01
Total	9,241	9,171	8,634	9,645	10,648	47,339	100.00

ROAD LOCATION AT WHICH FATAL ACCIDENTS OCCURRED

Table 6(b).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Street intersection	67	72	58	81	76	354	15.2
Between street intersections	112	96	71	105	100	484	20.7
Rural intersection	29	23	17	19	19	107	4.6
Straight road	175	159	138	158	182	812	34.8
Private driveway	22	18	14	14	16	84	3.6
Curve	41	32	25	34	42	174	7.4
Hill	27	23	22	32	24	128	5.5
R.R. crossing (a) Man on duty or gates	1	3	2	2	2	10	.4
R.R. crossing (b) Automatic signal	7	11	5	1	7	31	1.3
R.R. crossing (c) Unguarded	35	21	18	23	25	122	5.2
Bridge	9	3	2	7	7	28	1.2
On ferry or dock	.....	.....	.....	.....	1	1	.1
Total	525	461	372	476	501	2,335	100.0

ALL ACCIDENTS CLASSIFIED ACCORDING TO LIGHT CONDITIONS PREVAILING

Table 7(a).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Daylight	5,239	5,210	4,992	5,242	5,881	26,564	56.2
Dusk	799	569	489	452	454	2,763	5.8
Dark	3,181	3,378	3,143	3,941	4,309	17,952	38.0
Not stated	22	14	10	10	4	60	......
Total	9,241	9,171	8,634	9,645	10,648	47,339	100.0

FATAL ACCIDENTS CLASSIFIED ACCORDING TO LIGHT CONDITIONS PREVAILING

Table 7(b).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Daylight	282	235	193	247	236	1,193	51.1
Dusk	48	36	25	32	23	164	7.0
Dark	194	190	154	197	242	977	41.9
Not stated	1	.....	.....	.....	......	1	......
Total	525	461	372	476	501	2,335	100.0

ALL ACCIDENTS BY HOUR OF OCCURRENCE

Table 8(a).

	1931	1932	1933	1934	1935	Total	Per Cent of Total
12 to 1 A.M.	301	253	253	328	377	1,512	3.2
1 to 2 A.M.	178	201	141	222	274	1,016	2.2
2 to 3 A.M.	136	177	121	150	196	780	1.7
3 to 4 A.M.	83	74	104	92	122	475	1.0
4 to 5 A.M.	67	76	71	74	93	381	.8
5 to 6 A.M.	54	62	61	69	65	311	.7
6 to 7 A.M.	90	88	85	113	103	479	1.0
7 to 8 A.M.	129	124	126	175	170	724	1.5
8 to 9 A.M.	245	280	229	260	296	1,310	2.8
9 to 10 A.M.	234	262	253	218	290	1,257	2.7
10 to 11 A.M.	379	350	345	324	391	1,789	3.8
11 to 12 A.M.	431	401	441	444	505	2,222	4.7
12 to 1 P.M.	464	455	442	459	503	2,323	4.9
1 to 2 P.M.	393	396	391	414	474	2,068	4.4
2 to 3 P.M.	452	460	412	455	474	2,253	4.8
3 to 4 P.M.	492	504	530	517	580	2,623	5.6
4 to 5 P.M.	665	670	640	635	734	3,344	7.1
5 to 6 P.M.	882	871	797	909	960	4,419	9.4
6 to 7 P.M.	729	767	680	769	806	3,751	8.0
7 to 8 P.M.	672	712	648	687	784	3,503	7.4
8 to 9 P.M.	658	627	603	727	737	3,352	7.1
9 to 10 P.M.	542	493	448	562	564	2,609	5.5
10 to 11 P.M.	481	401	388	484	498	2,252	4.8
11 to 12 P.M.	413	437	382	511	587	2,330	4.9
Not stated	71	30	43	47	65	256	.....
Total	9,241	9,171	8,634	9,645	10,648	47,339	100.0

FATAL ACCIDENTS BY HOUR OF OCCURRENCE

Table 8(b).

	1931	1932	1933	1934	1935	Total	Per Cent of Total
12 to 1 A.M.	13	12	19	18	25	87	3.7
1 to 2 A.M.	10	8	7	13	20	58	2.5
2 to 3 A.M.	11	10	7	9	10	47	2.0
3 to 4 A.M.	4	3	3	7	9	26	1.1
4 to 5 A.M.	5	7	1	5	3	21	.9
5 to 6 A.M.	5	7	2	6	3	23	1.0
6 to 7 A.M.	8	7	5	10	4	34	1.5
7 to 8 A.M.	8	6	2	8	6	30	1.3
8 to 9 A.M.	18	22	7	12	17	76	3.3
9 to 10 A.M.	13	9	7	11	13	53	2.3
10 to 11 A.M.	18	14	21	17	17	87	3.7
11 to 12 A.M.	23	11	16	24	17	91	3.9
12 to 1 P.M.	24	22	14	18	17	95	4.1
1 to 2 P.M.	20	17	21	18	21	97	4.2
2 to 3 P.M.	19	16	19	9	16	79	3.4
3 to 4 P.M.	30	28	12	35	23	128	5.5
4 to 5 P.M.	42	21	21	32	36	152	6.5
5 to 6 P.M.	40	36	29	42	38	185	7.9
6 to 7 P.M.	39	57	36	35	41	208	8.9
7 to 8 P.M.	43	44	32	33	43	195	8.4
8 to 9 P.M.	42	42	34	38	46	202	8.7
9 to 10 P.M.	32	23	19	28	24	126	5.4
10 to 11 P.M.	30	19	18	22	21	110	4.7
11 to 12 P.M.	25	20	19	26	28	118	5.1
Not stated	3	.....	1	.....	3	7	.....
Total	525	461	372	476	501	2,335	100.0

ALL ACCIDENTS BY DAY OF OCCURRENCE

Table 9(a).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Sunday	1,247	1,185	1,214	1,333	1,353	6,332	13.4
Monday	1,193	1,171	1,202	1,354	1,425	6,345	13.4
Tuesday	1,164	1,172	1,161	1,239	1,380	6,116	12.9
Wednesday	1,220	1,223	1,089	1,241	1,348	6,121	12.9
Thursday	1,277	1,198	1,094	1,230	1,360	6,159	13.0
Friday	1,287	1,385	1,249	1,256	1,610	6,787	14.4
Saturday	1,852	1,837	1,625	1,989	2,172	9,475	20.0
Not stated	1	.....	.....	3	.....	4	......
Total	9,241	9,171	8,634	9,645	10,648	47,339	100.0

FATAL ACCIDENTS BY DAY OF OCCURRENCE

Table 9(b).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Sunday	70	70	58	70	85	353	15.1
Monday	76	62	53	63	62	316	13.5
Tuesday	65	53	48	63	82	311	13.3
Wednesday	66	59	35	64	63	287	12.3
Thursday	75	60	41	57	50	283	12.1
Friday	72	62	52	64	57	307	13.2
Saturday	101	95	85	95	102	478	20.5
Not stated	.....	.....	.....	.....	......	......	......
Total	525	461	372	476	501	2,335	100.0

SEX OF DRIVERS INVOLVED IN ALL ACCIDENTS

Table 10(a).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Male	12,561	12,184	11,319	12,872	14,096	63,032	93.5
Female	775	876	822	859	1,015	4,347	6.5
Total	13,336	13,060	12,141	13,731	15,111	67,379	100.0

SEX OF DRIVERS INVOLVED IN FATAL ACCIDENTS

Table 10(b).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Male	588	495	394	537	555	2,569	94.8
Female	26	31	26	33	24	140	5.2
Total	614	526	420	570	579	2,709	100.0

DRIVERS IN ALL ACCIDENTS DETAILED BY AGE GROUP

Table 11(a).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Under 18 years	273	224	172	205	190	1,064	1.9
18 to 24 years	2,492	2,428	2,287	2,877	3,346	13,430	23.7
25 to 40 years	4,103	4,495	4,644	5,789	6,548	25,579	45.1
41 to 54 years	1,994	2,263	2,205	2,758	3,186	12,406	21.8
55 to 64 years	479	559	594	731	831	3,194	5.6
65 years and over	163	170	205	260	288	1,086	1.9
Not stated	3,832	2,921	2,034	1,111	722	10,620	......
Total	13,336	13,060	12,141	13,731	15,111	67,379	100.0

DRIVERS IN FATAL ACCIDENTS DETAILED BY AGE GROUP

Table 11(b).	1931	1932	1933	1934	1935	Total	Per Cent of Total
Under 18 years	15	7	4	7	8	41	1.7
18 to 24 years	139	122	102	135	143	641	25.9
25 to 40 years	218	207	167	226	237	1,055	42.7
41 to 54 years	108	91	78	121	125	523	21.1
55 to 64 years	28	33	29	31	30	151	6.1
65 years and over	12	11	11	13	15	62	2.5
Not stated	94	55	29	37	21	236	.....
Total	614	526	420	570	579	2,709	100.0

OPERATING EXPERIENCE OF DRIVERS IN ALL ACCIDENTS

Table 12(a).	**1931**	**1932**	**1933**	**1934**	**1935**	**Total**	**Per Cent of Total**
Less than 3 months	168	157	124	182	191	822	1.5
3 to 6 months	135	92	66	110	84	487	.9
6 to 12 months	65	59	47	43	97	311	.6
1 to 4 years	1,696	2,196	1,887	2,184	2,386	10,349	19.0
5 years and over	6,955	7,235	7,583	9,632	11,144	42,549	78.0
Not stated	4,317	3,321	2,434	1,580	1,209	12,861	......
Total	13,336	13,060	12,141	13,731	15,111	67,379	100.0

OPERATING EXPERIENCE OF DRIVERS IN FATAL ACCIDENTS

Table 12(b).	**1931**	**1932**	**1933**	**1934**	**1935**	**Total**	**Per Cent of Total**
Less than 3 months	8	5	6	12	7	38	1.8
3 to 6 months	3	3	.....	3	4	13	.6
6 to 12 months	8	3	2	2	......	15	.7
1 to 4 years	79	100	64	77	77	397	19.2
5 years and over	322	284	262	351	392	1,611	77.7
Not stated	194	131	86	125	99	635	......
Total	614	526	420	570	579	2,709	100.0

CONDITION OF DRIVERS INVOLVED IN ALL ACCIDENTS

Table 13(a).	**1931**	**1932**	**1933**	**1934**	**1935**	**Total**	**Per Cent of Total**
Intoxicated	137	151	121	155	154	718	1.1
Physical defect	13	21	38	38	52	162	.2
Extreme fatigue	49	106	98	107	156	516	.8
Normal	13,137	12,782	11,884	13,431	14,749	65,983	97.9
Total	13,336	13,060	12,141	13,731	15,111	67,379	100.0

CONDITION OF DRIVERS INVOLVED IN FATAL ACCIDENTS

Table 13(b).	**1931**	**1932**	**1933**	**1934**	**1935**	**Total**	**Per Cent of Total**
Intoxicated	13	10	12	17	8	60	2.2
Physical defect	.....	1	3	1	......	5	.2
Extreme fatigue	4	5	6	6	11	32	1.2
Normal	597	510	399	546	560	2,612	96.4
Total	614	526	420	570	579	2,709	100.0

TYPES OF VEHICLES INVOLVED IN ALL ACCIDENTS

Table 14(a).	**1931**	**1932**	**1933**	**1934**	**1935**	**Total**	**Per Cent of Total**
Passenger car	11,172	10,907	10,107	11,246	12,517	55,949	80.1
Commercial vehicle	1,946	1,991	1,971	2,332	2,524	10,764	15.4
Taxicab	244	218	176	227	175	1,040	1.5
Bus	101	104	75	82	80	442	.6
Motorcycle	282	282	262	239	279	1,344	1.9
Trailer	42	42	69	65	53	271	1.4
All others	15	6	14	7	11	53	.1
Not stated	80	50	5	6	6	147	......
Total	13,882	13,600	12,679	14,204	15,645	70,010	100.0

TYPES OF VEHICLES INVOLVED IN FATAL ACCIDENTS

Table 14(b).	**1931**	**1932**	**1933**	**1934**	**1935**	**Total**	**Per Cent of Total**
Passenger car	479	417	342	412	464	2,114	75.1
Commercial vehicle	110	107	87	150	118	572	20.3
Taxicab	10	3	6	7	8	34	1.2
Bus	3	3	4	3	3	16	.6
Motorcycle	23	12	10	10	13	68	2.4
Trailer	1	2	4	1	......	8	.3
All others	3	.....	.....	.....	......	3	.1
Not stated	9	12	2	4	1	28	......
Total	638	556	455	587	607	2,843	100.0

NUMBER OF PERSONS FATALLY INJURED

Table No. 15(a).

	Total All Ages				0–4 yrs.				5–14 yrs.			
	1935		4-year Total		1935		4-year Total		1935		4-year Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Collision with:												
Pedestrian	225	40.2	836	42.3	26	86.7	98	85.3	40	76.9	179	76.2
Other motor vehicle	81	14.5	293	14.8	....	.....	2	1.7	4	7.7	14	6.0
Horse-drawn vehicle	9	1.6	29	1.5	....	.....	....	.....	....	.....	....	.....
R.R. train	62	11.1	195	9.9	....	.....	2	1.7	....	.....	5	2.1
Street car	11	2.0	36	1.8	....	.....	....	.....	....	.....	2	.8
Other vehicles	1	.2	5	.2	....	.....	....	.....	....	.....	....	.....
Fixed object	69	12.3	186	9.4	1	3.3	6	5.2	2	3.8	4	1.7
Bicycle	36	6.4	120	6.1	....	.....	....	.....	3	5.8	19	8.1
Motorcycle	7	1.2	32	1.6	....	.....	....	.....	....	.....	....	.....
Non-collision	59	10.5	235	11.9	3	10.0	6	5.2	3	5.8	12	5.1
Miscellaneous	....	.....	10	.5	....	.....	1	.9	....	.....	....	.....
Total	560	100.0	1977	100.0	30	100.0	115	100.0	52	100.0	235	100.0

NUMBER OF PERSONS NON-FATA

Table No. 15(b).

	Total All Ages				0–4 years				5–14 years			
	1935		4-year Total		1935		4-year Total		1935		4-year Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Pedestrian	3149	32.0	11457	32.8	407	81.2	1459	80.6	1089	68.3	4182	71.2
Other motor vehicle	3463	35.2	12008	34.4	75	15.0	257	14.2	195	12.2	689	11.7
Horse-drawn vehicle	191	1.9	749	2.2	2	.4	8	.4	11	.7	34	.6
R.R. train	90	.9	357	1.0	...	.....	2	.1	4	.3	21	.4
Street car	153	1.6	543	1.6	3	.6	9	.5	4	.3	23	.4
Other vehicles	12	.1	48	.1	...	.....	....	.....	....	.....	....	.....
Fixed object	841	8.6	2720	7.8	7	1.4	34	1.9	36	2.3	95	1.6
Bicycle	1028	10.4	3090	8.8	1	.2	4	.2	214	13.4	681	11.6
Motorcycle	187	1.9	739	2.1	...	.....	1	.1	....	.....	10	.2
Non-collision	687	7.0	3075	8.8	5	1.0	30	1.7	39	2.4	130	2.2
Miscellaneous	36	.4	151	.4	1	.2	5	.3	2	.1	8	.1
Total	9839	100.0	34937	100.0	501	100.0	1809	100.0	1594	100.0	5873	100.0

CLASSIFIED BY TYPE OF COLLISION AND BY AGE GROUP

15–35 yrs.				36–54 yrs.				55–64 yrs.				65 yrs. and over			
1935		4-year Total		1935		4-year Total		1935		4-year Total		1935		4-year Total	
No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
30	16.8	101	15.9	45	29.8	143	32.2	32	44.4	103	45.2	52	68.4	212	66.5
34	19.0	123	19.3	29	19.2	79	17.8	9	12.6	37	16.2	5	6.6	38	11.9
3	1.7	12	1.9	2	1.3	7	1.6	3	4.2	5	2.2	1	1.3	5	1.6
21	11.7	85	13.4	25	16.6	60	13.5	11	15.3	28	12.3	5	6.6	15	4.7
6	3.3	16	2.5	4	2.6	15	3.4	1	1.4	3	1.3	....	......	....	.....
1	.6	2	.3	....	......	2	.4	....	......	....	......	....	......	1	.3
33	18.4	91	14.3	22	14.5	50	11.3	5	6.9	18	7.9	6	7.9	17	5.3
18	10.1	56	8.8	9	6.0	28	6.3	5	6.9	12	5.3	1	1.3	5	1.6
6	3.3	30	4.7	1	.7	1	.2	....	......	1	.4	....	......	....	.....
27	15.1	118	18.6	14	9.3	55	12.4	6	8.3	19	8.3	6	7.9	25	7.8
....	......	2	.3	....	......	4	.9	....	......	2	.9	....	......	1	.3
179	100.0	636	100.0	151	100.0	444	100.0	72	100.0	228	100.0	76	100.0	319	100.0

LLY INJURED CLASSIFIED BY TYPE OF COLLISION AND BY AGE GROUP

15–35 yrs.				36–54 yrs.				55–64 yrs.				65 years and over				Not Stated	
1935		4-year Total		1935		4-year Total		1935		4-year Total		1935		4-yr. Total			
No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.
522	13.7	1851	14.2	516	24.1	1690	23.2	227	35.9	759	35.1	247	51.3	860	51.8	141	656
1544	40.6	5350	40.9	951	44.3	3124	42.9	239	37.9	816	37.9	144	29.9	461	27.7	315	1311
67	1.8	267	2.0	56	2.6	213	2.9	16	2.5	76	3.5	12	2.5	59	3.5	27	92
42	1.1	179	1.4	25	1.2	74	1.0	3	.5	21	1.0	5	1.1	11	.7	11	49
72	1.9	225	1.7	49	2.3	182	2.5	9	1.5	33	1.5	5	1.1	16	1.0	11	55
2	.1	12	.1	7	.3	18	.2	2	.3	5	.2	...	.....	4	.2	1	9
447	11.7	1422	10.9	204	9.5	667	9.2	52	8.2	166	7.7	28	5.8	85	5.1	67	251
574	15.1	1622	12.5	143	6.7	442	6.1	35	5.4	81	3.8	11	2.3	41	2.5	50	219
160	4.2	603	4.6	4	.2	35	.5	4	.5	5	.2	...	.....	2	.1	19	83
348	9.1	1442	11.0	183	8.5	807	11.1	46	7.3	193	8.9	29	6.0	121	7.3	37	352
28	.7	93	.7	7	.3	32	.4	...	.....	5	.2	...	.....	2	.1	....	6
3806	100.0	13066	100.0	2145	100.0	7284	100.0	633	100.0	2160	100.0	481	100.0	1662	100.0	679	3083

CLASSIFICATION OF PERSONS FATALLY INJURED

Table No. 16(a).	1932	1933	1934	1935	Total	Per Cent of Total
Drivers	100	65	109	102	376	19.0
Passengers	125	121	140	175	561	28.4
Pedestrians	230	175	215	227	847	42.8
Others*	8	7	6	10	31	1.6
Bicyclists	27	25	31	36	119	6.0
Motorcycle drivers	10	6	7	9	32	1.6
Motorcycle passengers	2	4	4	1	11	.6
Total	502	403	512	560	1,977	100.0

CLASSIFICATION OF PERSONS NON-FATALLY INJURED

Table No. 16(b).	1932	1933	1934	1935	Total	Per Cent of Total
Drivers	1,546	1,423	1,630	1,782	6,381	18.3
Passengers	3,041	2,827	3,208	3,492	12,568	36.0
Pedestrians	2,737	2,646	2,979	3,179	11,541	33.0
Others*	113	121	151	142	527	1.5
Bicyclists	572	649	822	1,021	3,064	8.8
Motorcycle drivers	175	163	163	184	685	1.9
Motorcycle passengers	47	48	37	39	171	.5
Total	8,231	7,877	8,990	9,839	34,937	100.0

*Passengers in horse-drawn vehicles or in other vehicles not motor vehicles or bicycles.

CLASSIFICATION OF PERSONS FATALLY INJURED IN URBAN ACCIDENTS

Table No. 16(c).	1932	1933	1934	1935	Total	Per Cent of Total
Drivers	27	18	24	22	91	11.9
Passengers	16	27	28	39	110	14.4
Pedestrians	139	100	133	117	489	63.8
Others—(Persons in horse-drawn vehicles, etc)	1	1	.....	4	6	.8
Bicyclists	10	11	15	17	53	6.9
Motorcycle drivers	5	1	4	4	14	1.8
Motorcycle passengers	1	.....	1	1	3	.4
Total	199	158	205	204	766	100.0

CLASSIFICATION OF PERSONS FATALLY INJURED IN RURAL ACCIDENTS

Table No. 16(d).	1932	1933	1934	1935	Total	Per Cent of Total
Drivers	73	47	85	80	285	23.5
Passengers	109	94	112	136	451	37.2
Pedestrians	91	75	82	110	358	29.6
Others—(Persons in horse-drawn vehicles, etc.)	7	6	6	6	25	2.1
Bicyclists	17	14	16	19	66	5.4
Motorcycle drivers	5	5	3	5	18	1.5
Motorcycle passengers	1	4	3	....	8	.7
Total	303	245	307	356	1,211	100.0

CLASSIFICATION OF PERSONS NON-FATALLY INJURED IN URBAN ACCIDENTS

Table No. 16(e).	1932	1933	1934	1935	Total	Per Cent of Total
Drivers	570	513	590	632	2,305	11.5
Passengers	1,088	1,028	1,224	1,270	4,610	22.9
Pedestrians	2,325	2,255	2,522	2,687	9,789	48.7
Others—(Persons in horse-drawn vehicles, etc.)	42	43	43	66	194	1.0
Bicyclists	489	529	685	885	2,588	12.9
Motorcycle drivers	130	110	115	136	491	2.4
Motorcycle passengers	35	28	31	25	119	.6
Total	4,679	4,506	5,210	5,701	20,096	100.0

CLASSIFICATION OF PERSONS NON-FATALLY INJURED IN RURAL ACCIDENTS

Table No. 16(f).

	1932	1933	1934	1935	Total	Per Cent of Total
Drivers	976	910	1,040	1,150	4,076	27.5
Passengers	1,953	1,799	1,984	2,222	7,958	53.6
Pedestrians	412	391	457	492	1,752	11.8
Others—(Persons in horse-drawn vehicles, etc.)	71	78	108	76	333	2.2
Bicyclists	83	120	137	136	476	3.2
Motorcycle drivers	45	53	48	48	194	1.3
Motorcycle passengers	12	20	6	14	52	.4
Total	3,552	3,371	3,790	4,138	14,841	100.0

NUMBER OF DEATHS PER HUNDRED PERSONS NON-FATALLY INJURED*

Table No. 16 (g).

Classification	In All Accidents	In Urban Accidents	In Rural Accidents	In City Accidents	In King's Hy. Accidents
Drivers	5.9	3.9	7.0	2.6	5.3
Passengers	4.5	2.4	5.7	1.6	4.6
Pedestrian	7.3	5.0	20.4	4.1	23.5
Others—(Persons in horse-drawn vehicles, etc.)	5.9	3.0	7.5	1.8	4.9
Bicyclists	3.9	2.0	13.9	1.7	20.2
Motorcycle drivers	4.7	2.8	9.3	3.1	10.6
Motorcycle passengers	6.4	2.5	15.4	2.7	14.3
Average for group	5.7	3.8	8.2	3.0	6.9

*Based on four years experience, 1932 to 1935.

Ontario Research Foundation
REPORT

For the Year 1936

Presented by the Chairman
to the Lieutenant-Governor in Council
December, 1936

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1937

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February 25th, 1937.

THE HONOURABLE MITCHELL F. HEPBURN, M.P.P.,
Prime Minister of Ontario,
Parliament Buildings, Toronto.

DEAR SIR:

I have the honour to present the Report of the Ontario Research Foundation concerning the work performed during the year 1936.

You will observe in the Financial Statement which is attached to the Report that the market value of our investments in securities exceeds the amount of the Endowment Fund created out of the subscriptions paid by the Legislature of the Province, private corporations and individual contributors. The Foundation has continued to live within the income derived from these investments and from services performed on behalf of industry.

The report of the Director to me which follows is evidence of the increasing demands upon us for a diversified and competent staff of scientists to cope with the problems of industry and agriculture. Every effort is being made to husband and add to our resources in order that we may obtain, develop and retain the services of a group of men capable of discharging their duties on behalf of the people of this Province.

To a degree which has been to me a deep source of satisfaction, the Foundation has succeeded during these formative and difficult years in demonstrating what can be accomplished in the world of practical affairs when scientific imagination and experimental skill, work in team-play with leadership, enterprise and faith in manufacturing and business operations.

The story of our work is evidence of what scientific research can accomplish in facilitating better products, reduced costs, improved returns and more employment. It demonstrates a method and an attitude of mind which should gradually permeate and change our conduct of affairs in general. It has a contribution to make which is vital to the development of our economic life and the gradual betterment of our social fabric.

I have the honour to be,

Your obedient servant,

J. W. FLAVELLE,
Chairman.

REPORT OF THE DIRECTOR OF RESEARCH, 1936

To Sir Joseph Flavelle, Bart., LL.D.,
Chairman

Dear Sir:

Once more it is my privilege to report to you concerning the work of this Foundation.

The figures relating to work performed by the staff on behalf of industry, show a gratifying increase. During the past year, we have been in contact with 181 firms, and in all 435 accounts were sent out by the office. The corresponding figures for last year were 140 firms, for whom 318 separate investigations were made. The total outside revenue amounted to $34,729.91, and I list below the comparative figures for the past six years:

1931	$30,214.09
1932	26,877.89
1933	18,311.23
1934	24,439.90
1935	32,311.52
1936	34,729.91

These figures show a striking resemblance to the many kinds of statistics used to illustrate the rise and fall in commercial activity, and taken together they are evidence of the fact that during the initial period of the Foundation's history, our work has been profoundly influenced by prevailing conditions. The return to more prosperous times leads me to express the hope that some of the returns of such prosperity will be set aside to support scientific research and maintain a steady policy even through periods of reduced business activity which may develop in the future. To-day industry should be applying in expanding markets not merely financial resources but a capital of knowledge, new ideas and experience gained during the past few years. Already we hear from friends in industry of the need for ways and means of retarding the rise in costs of production. This is only one phase of the problem.

In the later sections of my report, I have referred in greater detail to our efforts during the past year to provide the Foundation with personnel and equipment to meet the demands made upon us. Two new laboratories for research in the paint field and in air-conditioning are now running smoothly. These efforts are in response to the demand for a higher degree of specialization in our facilities. Industrial scientific research demands not only scientific training and capacity on the part of the investigator but technical knowledge, experience and judgment which demand concentration of reading and investigation plus intimate association with the applied side. The resources of this community cannot support institutions devoted to particular industries, but we can and should support units within the larger body of the Foundation as a whole. This type of organization creates problems peculiar to itself, for example, the quality of the staff must be uniformly high. On the other hand, our experience has already proved the great benefits that follow from the associating together of a variety of fields of scientific research. You will remember that not many months ago, important and most promising investigations started in our textile and paint laboratories as a result of a paper presented at one of our staff conferences by one working in food chemistry. This fact is confirmed almost every day.

Whilst it is gratifying to assist in the solution of the day-to-day problems of our industries, we are often tempted to ask, like the doctor, "Why did you not come earlier?" During the past year we were called upon to examine a piece of chemical engineering equipment, costing many thousands of dollars, which had failed completely to perform its intended functions. To put it right is one thing, but not as efficient as the working out beforehand, from first principles and experience combined, of the correct design. Waste of time, money and materials still constitutes an unknown item of cost in many industrial operations. That progress is being made, however, is manifest from the increasing number of plant control laboratories, the use of specifications and standards and the growth of professional and technical societies in the province.

The work originating within the Foundation is most encouraging. In each unit of the organization, industrial and agricultural, research work is in progress which is in harmony with the duties laid upon us by the Legislature, private citizens and corporations who contributed so generously to our establishment. For various reasons I cannot enlarge upon the work in detail but I should like to enumerate some of these investigations:

(a) Processes for the reduction of shrinkage in textile fabrics.

(b) A textile oil for use in the processing of woollen materials.

(c) A process for transferring pigment, used in the paint industry, from aqueous pastes to the oil phase.

(d) A process for the deodorization and partial hydrogenation of cod liver oil without destruction of the vitamin content.

(e) A new system of tannage for sole and belting leather.

(f) A microscopic method for the early diagnosis of bovine mastitis.

The monthly Bulletin, which is circulated among the manufacturers of the Province in order to keep them informed of our work, has fulfilled its purpose. Our circulation has been increased by the numerous requests received for copies, in some cases from firms and institutions abroad. I am deeply grateful to my colleagues for their earnest efforts to make this extension work a success.

I feel that I must close this introduction to my report with a note of gratitude and optimism. The early stages of any organization cannot be free from mistakes, both of omission and commission. We have received and are receiving assistance and cooperation not only from industry but various teaching and government institutions in the province, at Ottawa and abroad. To these must be given a large measure of thanks for whatever we may accomplish. Scientific work is in its very essence a combination of individual effort and cooperation. My optimism is based on a careful study of reports from my colleagues. The resources of the Foundation are intact, we have a group of men and women, original and creative in their approach to a given problem, and at the same time cooperative in outlook both by instinct and training. Within the scope of our available resources we are proceeding to enlarge the facilities both in equipment and personnel in order that we may be better able to meet the increasing demands upon us.

TEXTILES

Staff: Dr. Goodings, Dr. McKay, Mr. Coke, Mr. Carr-Harris

During the year, seventy firms have made use of the testing and research facilities available in this Division. They cover a wide and varied field of manufacturing activity, woollen, worsted, silk, rayon, cotton, felt and hosiery. Naturally, the problems submitted are similarly very varied in character, and it is difficult to organize the work either efficiently or economically. In the field of physical testing alone, it is a distinct asset to these industries that there should be available the type of service which the Foundation offers. We still look forward hopefully to the time when there will be some tangible expression of a corporate responsibility for the maintenance of these facilities. The great majority of the problems were associated with faults in finished products, the causes of which were, at least in part, not understood. It is gratifying to see a way clear through these and to assist in correcting or improving plant procedure. Year by year, however, I read in the reports of the Department, cases of the same general type from different plants, and I am convinced that a great opportunity exists in these industries to pool experience and trouble and support cooperatively patient, fundamental and profitable research. It is no reflection on the staff to say that at present we can very often only suggest a remedy for "symptoms" without having very clear ideas as to the real cause of the trouble or its cure. I plead, therefore, for a something more than "trouble-shooting" if these industries are to advance and keep pace with modern standards, let alone to be original and pioneers.

At the commencement of the year, the time and energies of the staff, apart from the outside work to which I have already referred, were concentrated on the rapid and successful development of a textile oil. This is intended not for use as a lubricant for machinery but for the far more important purpose of lubricating the material itself during the earlier stages of textile manufacturing. At the present time a wide range of pure oils and mixtures of oils are being used for this purpose. In all cases it is a necessary part of subsequent operations to remove the oil before the fabric etc. is dyed and finished. A good oil is one which satisfies all the demands as a lubricant and which is easily, cheaply and almost completely removed in the scouring operation.

Experiments performed in the laboratory during the early part of the year, showed that we had an oil mixture containing from 90 to 95 per cent. of mineral oil which could be removed by normal scouring procedure to a degree better than was the case when olive oil was used. Seeing that pure olive oil is the accepted standard for goods of higher quality in the industry, we were greatly encouraged by these results. Mineral oil, although it possesses many admirable qualities as a textile oil, cannot be used alone because normal scouring will not remove a sufficient amount from the semi-manufactured goods.

It is satisfactory to be able to report that our laboratory tests were completely confirmed during tests in two different plants. Although work remains to be done in connection with the manufacture and use of this oil on a commercial scale, the essential part has been accomplished. We have taken steps to protect this work, and preliminary negotiations are in progress relative to its manufacture in Canada and the United States.

In my previous report, reference was made to the development within these laboratories of a process for the production of high-resistance Tussah silk for electrical insulation purposes. I am pleased to report that the process has been in successful use during the past year in the plant of Dominion Silk Mills, Ltd., Toronto. This research was undertaken at the request of the Company, supported by them and throughout its course we have received their complete and most helpful cooperation. It is a story of accomplishment which illustrates the potentialities of such cooperation.

For several months, and at the time of writing, the Foundation has been investigating on behalf of the Ontario Department of Lands and Forests, a number of problems relating to the purchase and maintenance of unlined, linen fire-hose. This material is of vital importance in fire-control work in the north country; it has to withstand the effects of rough country and also long periods of storage. Four types are being investigated, and we hope to assist the Department in the preparation of effective specifications.

The Quality Control work in connection with the manufacture of knitted rayon garments has continued during the year. Its scope has been extended by the inclusion of new lines of garments and fabrics. A careful survey is still maintained of the merchandise being sold under the Quality Control Plan in stores across Canada. It is a pleasure to be able to record that standards of general quality, construction and size, are being lived up to by the manufacturers.

The problem of shrinkage still engages our attention. Our work on the prevention of shrinkage in woollen garments has been in abeyance during the year, but we have concentrated on a detailed analysis of the shrinkage of rayon and other artificial silk garments during normal usage. We are now able to distinguish between the shrinkage due to manufacturing operations and that due to qualities in the original yarn. These two phenomena are being investigated.

ENGINEERING AND METALLURGY

Staff: Mr. Ellis, Mr. Gordon, Dr. Goodier, Mr. Norman

The widespread improvement in business has been responsible for a definite increase in the work performed in these laboratories, for and in cooperation with the metallurgical industries of the Province. Not only has the total amount of work performed increased, but there has been a moderate though gratifying addition to the number of firms with whom we are in almost constant touch. In several cases this relationship now takes the form of an annual fee plus the charges incidental to the investigation of specific problems which are brought to our attention. It is our hope that during the next few years this small group of companies will steadily grow in numbers and provide sufficient permanent revenue to increase the staff of the laboratories, widen the scope of our investigations and thus provide a sound basis for scientific and technical advance in the industrial field we are considering.

In the field of industrial research it is impossible to make a sharp distinction between analytical work, testing—e.g. mechanical testing, and experimental work. A great deal of metallurgical research involves chemical analyses and physical testing, and the value of the research is often measured by the quality and accuracy of these operations. We feel that there is a definite duty to perform in raising these service laboratories to the highest possible pitch of accuracy and general efficiency, not merely for use within the Foundation, but in order that they may be available to the industries of the Province when such service is needed and called for. The war, and industry since the war, have created in Canada new and severe standards of accuracy in the products of manufacturing. Routine tests which are intended to guide and control plant operations require even higher standards. It is not unimportant that the staff of this Department should have spent time and thought during the past year on work of this kind.

In one or two instances, problems submitted to the Foundation have engaged our attention for the major part of the past year. Particular reference should be made to a study, still in progress, of the effects of heat treatment on chilled cast iron. At this point it would be difficult to assess the practical returns to the Company for which this work is being done. We can, however, refer to the stimulating effect of the contact with this industry and the research work itself on the staff. The general question of "heat treatment" is basic in modern metallurgical practice, sometimes an art rather than applied science, and we should welcome more opportunities to carry out cooperative research in this field.

The work on white cast iron to which we referred in our last report has continued without interruption during the past year. As a result of the earlier experiments performed in these laboratories it seemed clear that a group of "borderline alloys" offered the best solution of resistance to abrasion, and it is to such alloys rather than cast iron, in the ordinary sense, that our attention has since been devoted.

In cooperation with Canada Electric Castings Ltd., and especially with the senior officer of the Company, Mr. Burrows, and with several mines in the north, we have attempted to repeat laboratory tests on a commercial scale. This work has involved the manufacture of balls for use in the ore-grinding mills of the mines and also liners for the same equipment. In so far as the balls are concerned, these mill tests have already produced results of great value. They do not confirm our earlier conclusions which were necessarily based on the use of small equipment and one type of abrasive agent, silicon carbide. They do confirm the laboratory findings of this year which indicate that the loss in weight of ball material in a standard mill is a function of several phenomena including the composition of the ball and, equally important, the physical and chemical properties of the material passing through the mill. In other words it is quite possible that the highest efficiency in mill practice will depend on the careful selection of a ball by tests of several, using the ore of that locality as the abrasive agent.

The tests on mill liners made according to the composition and specifications of the Department are still in progress at several mines. In this connection we should like to acknowledge our indebtedness to all who have shared in these tests. Experimental work in a foundry is not conducive to plant efficiency, failures are inevitable in the early stages, and the same applies to work in the mill of a mine which is running smoothly. We can only say that success in our work is dependent on such generous cooperation by those in industry.

This research has placed us in a better position to discuss and investigate problems associated with this phase of mill practice. Already we have carried out a separate series of mill tests on special balls manufactured by an Ontario company on behalf of one of the mines.

For several years the staff have been working under Mr. Ellis' direction on problems relating to the forgeability of metals. During the past year, two papers were read at the National Metals Congress in Cleveland. The titles of these papers indicate the nature of the investigations completed: "The Behaviour of some Low-alloy Steels in the Single-blow Drop Test," and "The Effect of the Shape of the Test Piece upon the Energy Needed to Deform Materials in the Single-blow Drop Test." In the second paper it was shown that "in so far as steel and nickel (at all temperatures) and copper, lead and possibly aluminium (at room temperatures) are concerned," the relationship between energy of blow and percentage reduction in weight of normal cylindrical test pieces in the single-blow drop test is given by the following equation:

$$E = bD^{(1.56 - 0.47 \log b)}$$

In an earlier report I referred at greater length to this work and mentioned its recognition by others as an attempt to establish and formulate by the experimental method principles which would prove of great value as a basis for plant practice.

The investigation of alloys composed of cadmium, mercury and other elements, has been terminated for the time being. Our conclusion is that some of these alloys may, under certain economic conditions concerning the price of individual metals, fill a useful role in the manufacture of bearings. This work is the basis of an application for patents.

Applied Mechanics: At the request of an Ontario company, a dynamometer to measure the turning effort required by cream separators was designed and constructed.

An enquiry growing out of a failure of rock-drills was the immediate cause of an investigation of the contribution of corrosion-fatigue to failures of this type.

The requirements of other laboratories within the Foundation for suitable testing and experimental equipment have brought a varied and increasing quantity of work to this Department. The variety may be illustrated by comparing tests of air conditioning equipment, tooth-paste tubes and samples of glue.

It has been a productive year in the field of theoretical investigations relating to practical problems. Those on thermal stress—stress set up by uneven heating—brought a request from the American Society of Mechanical Engineers for a summary of known results, for publication as design data.

Mr. Ellis has been elected a trustee of the American Society for Metals. He has also been asked by the American Foundrymens' Association to present in 1937, the exchange paper at a meeting of the Institute of British Foundrymen. It is a very great pleasure to report to you these tributes to my senior colleague. They are a recognition not only of his scientific and technical contributions but also of the unselfish and devoted service he has rendered to the work of these Societies in the Province, and in the United States.

During the past year, the Foundation suffered a severe loss when Mr. Gordon left in order to assume the position of Director in the new research laboratories shortly to be completed at Copper Cliff. Mr. Gordon came to us in the early days of the Foundation, and made a fine contribution to the establishment of the work in this Department. We all miss a most congenial colleague. These feelings are associated with some pride that one of our number should have been selected by the International Nickel Company for this important post.

CHEMISTRY

Staff: DR. WESTMAN, MR. SCHIERHOLTZ, MR. TASKER, MR. MACONACHIE, MR. STAPLES, MR. MACHATTIE

During the year 1935, the staff of the Chemistry Division conducted a survey of the manufacturing industries of the Province with a view to making specific recommendations for a reorganization of our work. After careful consideration, it was decided to establish closer contact with one or more process industries, to equip special laboratories for such work and to invest time and money in the proper training of personnel. After studying the reports of the staff covering the work done in 1936, I can say with confidence that this method of approach has been completely justified, and it provides a plan which should guide subsequent enlargement of our facilities in the Foundation as a whole. To illustrate, since the paint laboratory was established eighteen months ago the following have been accomplished: (a) the laboratory is suitably equipped; (b) methods employed in the investigation of raw materials and of both producer and consumer problems are now in daily use; (c) the laboratory is being used by producers and consumers of paints, lacquers and varnish; (d) research is in progress which we hope will lead to technical advance in the industry. A similar report has been presented to me concerning the progress of our work in the field of air-conditioning.

When we have expended our available resources on the equipping and manning of laboratories designed to handle the problems of particular industries there will still remain by far the larger part of the industrial research field which is loosely covered by the word "chemistry." It is our hope that as soon as possible the various laboratories which have demonstrated their value will receive sufficient support from the appropriate branches of industry to carry them and thus liberate funds for experimental work and the establishment of more research facilities.

Ceramics: During the past year, there has been a modest increase in the demands made on this laboratory by industry. This is no doubt due to the gradual improvement which has taken place in the construction industries. It is perhaps asking too much to expect companies which have been cruelly affected by the depression to show interest in research, but what alternative is there at least to improve conditions. Competitive products gradually crowd out those of static industries, and this fact is very clearly illustrated by a study of the materials now being used in construction work.

For a period of about six months, we have been investigating the possibility of manufacturing, from clays found in the vicinity of Toronto, a brick which will in colour match as closely as possible Indiana limestone. Bricks of this type can be made from naturally occurring clays in the United States, but so far this has not been possible in Ontario. This work has been supported in part by a grant from one of the producers, and their technical advice and knowledge of the industry have been of the greatest assistance to us. The laboratory work has been supplemented by experimental 'burns' in commercial kilns, and this type of cooperative research will be continued in the new year. The indications at present are that a solution of the problem will be found.

Our investigation of the possibility of making greater use in the ceramic industries of the vast quantities of tailings from mines in Northern Ontario is still in progress. Interesting new bodies and glazes for ceramic products of various sorts have been found which are worthy of more extensive study. During the burning of a large series of experimental bodies data has been secured which will contribute towards an understanding of the more general problem known as 'overfiring'.

Air-conditioning: The maintenance in buildings of an atmosphere within known limits of temperature, humidity and freedom from dust is developing rapidly on this continent. Restricted in the past to public or other large buildings a greatly increased demand exists today for small and relatively inexpensive equipment to be operated in single rooms or ordinary homes. Here we are concerned with engineering equipment which may or may not influence our health and our comfort, which may or may not influence our pockets, and one which should not be wholly dissociated in our thinking from the rest of the house of which it may now be a part. We have endeavoured to make a contribution to the needs of those in the industry in two ways: (a) By providing personnel and equipment so that whole installations for air-conditioning and parts thereof may be tested in the Foundation under known and controlled conditions. These facilities are being used. The tests are important in themselves to manufacturers who wish to avoid conflict between published claims and service results. In most cases they open up possibilities for redesign and worth while improvements. (b) For several years the American Society of Heating and Ventilating Engineers has been endeavouring to determine experimentally the so-called comfort zone of temperature and humidity for normal healthy people in an air-conditioned building. Most of the work has been done in the laboratories of the Society in Pittsburgh, and there has been some doubt as to whether such standards were applicable to humans in centres both north and south of Pittsburgh. During the past summer, this Foundation undertook to enquire into and report to the Society on the summer 'comfort' requirements of people in Toronto. A new room was prepared, well-insulated, and equipped with all the necessary apparatus to maintain desired atmospheric conditions. Four male students from the University of Toronto acted as subjects and maintained a practical interest in the work itself. From June 29th until July 29th, forty-two tests were made in the room and two in local theatres.

Such a limited amount of research in connection with what is essentially a biological problem can only provide useful suggestions and not fixed conclusions. These are as follows: There is strong evidence that the 'comfort zone' for Toronto is not identical with the one recommended for the Northern States. Canadian standards should be based on a study of Canadian subjects and Canadian meteorological data. Common sense and experience support one tentative conclusion, namely, that our desirable summer 'comfort zone' is lower than the American standard.

We are grateful to the following companies for loans of equipment used in this investigation: Canadian Westinghouse Company, Ltd.; Minneapolis-Honeywell Regulator Company, Ltd.; C. A. Dunham Company, Ltd.; and the Canadian General Electric Company, Ltd.

Gas: The research work conducted in this laboratory is supported by the Consumers' Gas Company. In the main, the staff this year has devoted its efforts, in cooperation with other Departments in the Company organization, in an attempt to analyze and remove the causes of line stoppages in the distributing system. The investigation of the causes of failure of hot-water tanks in domestic service continues.

. An apparatus and method have been developed to enable rapid measurements to be made of small quantities of oxygen in other gases. This we hope will be a useful addition to the methods at present available in gas analysis and research.

Paint and Varnish: I have already referred to the reorganization of this laboratory. It still is called upon to carry out a variety of short term researches falling within the broad field of organic chemistry. The variety of problems can be conveyed by listing some of the materials involved: Printers' rollers, Annatto seed, antifreeze, bank cheques, water-proof paste, bread wrappers, etc.

These problems of the past two or three years contain a fairly large percentage referring to paper, cardboard, boxes, inks, etc., and it would appear that there is a field of industrial activity which is still inadequately served by research facilities in Canada. It is a border-line field involving a variety of processed or manufactured products. The value of the output places it among one of the most important industrial groups in this Province.

To return to the paint research in progress in this laboratory. The following investigations are being conducted of standard products for sale in the Province: (a) weathering tests and chemical analyses of white house paints; (b) tests on ten samples of commercial varnish; (c) weathering of structural metal paints, a comparison of results obtained in the weatherometer, fugitometer, and by outdoor exposure; (d) tests of paints applied to a galvanized iron surface; (e) a comparison of light green enamels from eight sources applied to metal and wood panels. The results obtained from this painstaking investigation of the products of this industry and standard methods for both chemical and physical testing of such products, will react beneficially on the work of this Foundation.

A paint may be regarded as a mixture or suspension of a finely divided pigment in a mixture of oils and other chemicals. Many of these pigments are in the form of aqueous pastes when first introduced into the process. The removal of the water changes the physical character of the pigment, larger aggregates developing which later on have to be broken down. During the past year an attempt has been made to develop a process by which aqueous pastes of pigment can be dispersed in an organic liquid, the water removed and without aggregation of the pigment. Convenience, economy and a better product are the goals of this investigation. At present, we can only describe the results obtained as being most encouraging.

BIOCHEMISTRY

Staff: Dr. Barbour, Mr. Henry, Mr. Lemon

Food Research: The staff have been engaged during the greater part of the year in tests and semi-commercial trials in connection with the Matzka process. This was invented and developed in France by Dr. W. Matzka, and is essentially a low-temperature method for the pasteurization of liquid foods and beverages. At the request of Matzka Canadian Ltd., a member of our staff visited Europe and inspected installations of plant, methods of processing, and the products in France, Holland and Germany. The Canadian Company subsequently authorized expenditure to instal at the Foundation, a plant-size unit, and for several months this has been in constant use, first of all to determine and subsequently to demonstrate the type of product which can be made from milk, Canadian fruits and imported citrus fruits. In addition, we have built a laboratory-size unit which is being used mainly for investigations in new products and new methods of operating. By this process it is possible to sterilize products at a temperature 15 to 20 degrees below that required when heat alone is used. As a result there is no destruction of the flavour, and the loss of vitamins is negligible.

In addition to the above, minor problems have been submitted to us relating to the production of vinegar, bread, salted eggs, sugar syrup, malt, canned tomatoes.

Leather: Whereas in earlier years this laboratory has been chiefly concerned with problems associated with the manufacture of the lighter leathers, our present report covers work relating to the heavy leather industries.

In the manufacture of boots and shoes, it has become customary to cement on the soles and afterwards attach them more permanently by sewing, etc. Water-proof soles because of their water-resisting and better wearing qualities have recently been in demand, but at least in the early stages of their development, it was found they could not be fastened on to shoes by means of the cements in common use. The problem in this form, was submitted to us by a sole leather manufacturer in this Province. The staff have produced a water-proof sole slightly superior to the original submitted to us, and one which can be used easily and quickly by the shoe manufacturer. At the present time our costs have been shown by plant trials to be too high, and further work is in progress.

The second major problem relates to the production of a combination vegetable tannage for sole and transmission belting leather. Vegetable tanned leathers, full chrome leather and some combination tanned, are at present in use. The vegetable tanned has proved to be satisfactory from the point of view of good service and yield. It has a serious disadvantage in that it requires several months for its manufacture. The other two methods have certain disadvantages but they can be completed in a much shorter time. The object of our research has been to develop a process which would cut down materially on the time required for vegetable tanning and at the same time sacrifice none of the good qualities of this type of leather.

After several months of preliminary experimentation a method was selected and is now being worked on a large scale in the laboratory. Sufficiently large samples are passing through the process to produce semi-commercial sized blocks of belting and sole leather. Controls are being run and we shall soon be able to compare (a) the characteristics of our leather with standard products; (b) the time involved; and (c) the yields of leather obtained compared with standard methods.

General Problems: Bacteria and molds grow and prosper in strange places, one of them being in the tanks and pipes of a paper mill. The particularly objectionable types are the "slime" formers. These produce aggregates of slimy material which occasionally pass through the system and cause kinks in the paper passing out from the machine. All who have seen the staff of a newsprint mill galvanized into activity by one of these sudden breaks will appreciate that everything possible is being done to reduce their occurrence. We were asked by one of the newsprint producers to conduct a survey of their plant from a bacteriological viewpoint. Samples were removed at various points, and from these, six types of slime-producing bacteria were isolated. By a study of their behaviour under laboratory conditions, we were able to recommend the steps necessary to keep them under control in the plant.

AGRICULTURE

Staff: Mr. Jarvis, Mr. Chapman, Dr. Skey

The work performed during the past year is part of the major objective which has determined each step in our research programme, namely, to obtain in as short a time as possible a picture of the conditions which are associated with plant growth in Ontario and the relationship between these and the optimum conditions for the cultivation of crops of economic importance. The first part of the programme can be carried out with different degrees of refinement and detail, ultimately a study of individual farms or fields. For many reasons, this type of study is unpractical and we have accordingly divided the Province into Regions in which a measure of uniformity of climate, etc., is to be found.

The concentration of different types of agriculture in different parts of the Province is proceeding. The process is based on an expanding body of knowledge and experience, trial and error and the pressure of economic circumstances. The segregation of small fruits, apples, tobacco and sugar beet are characteristic examples. The information and knowledge obtained by such investigations can only be a help to the individual farmer; it cannot solve his problem but must be integrated with the problems relating to his particular farm and the various factors which are peculiar to his situation. May I illustrate by recounting an incident which came to my attention recently. Three years ago, a farmer listened to one of my colleagues describing the relationship between the optimum conditions for the potato plant and those climatic and other conditions which exist in this Province. It was brought home to him why growing potatoes on his particular farm had never paid. The decision to stop and to grow tomatoes was entirely the result of his own intelligent analysis of the facts made available by this investigation. Simple as it may therefore be, carrying with it no promise of rules which if mechanically applied lead to success, we again stress the basis of whatever we attempt in this department, namely, an ever expanding knowledge of land, its condition, its potentialities and its relationship to plant and animal growth.

A small orchard is a characteristic feature of most farms in southern Ontario. They formed an important part of the economy of self-sufficing farming of an earlier period, but gradually the growth and sale of apples have become a specialized occupation and the good orchards of the Province are becoming concentrated in a few districts. During the past summer a survey of these districts has been made. At the present time the material collected is being examined and correlated with the observations made in the field. The following are some of the lines of study which call for more detailed consideration and field work:

(a) There are several hundred varieties of apples being grown in this Province. Which are the best from an economic standpoint in the regions examined?

(b) The average life of an orchard is relatively short. It represents a heavy investment, and each additional year of productivity would add much to the return on the investment.

(c) There is a widespread incidence of physiological diseases such as corky core, drought spot, bitter pit, etc. These problems require a careful study by competent specialists.

(d) In one region several hundred acres of orchard have reached maturity and failed to bear fruit.

(e) Winter-kill, especially during the 1933-34 winter, is a frequent and widespread source of loss to the apple grower. The loss is not uniform and cannot be correlated with temperature alone.

(f) Individual orchards in the different apple growing regions stand out in their combination of longevity and high yields. What are the associated circumstances of variety, climate, soil and cultural methods?

During the past summer, the soil types found in Southern Ontario have been rechecked. From the field work of the past two summers we have secured 20 to 25 samples from each of the major soil types. These samples have all been tested and the resulting information will enable us to determine fertility levels for these types. Series of photographs are now available of typical profiles, and these are supplemented by photographs illustrating topography and characteristic flora. We hope to have sufficient information on hand which will enable any farmer to recognize the main types in which he may be interested.

Economics: Marketing, price and other problems associated with the grape industry of Ontario have continued to be one of our major interests.

By means of a representative group of current official publications we are following closely the development of agriculture and the utilization of natural resources in Russia.

PATHOLOGY AND BACTERIOLOGY

Staff: DR. HADWEN, DR. GWATKIN, MR. FALLIS

The work in the laboratories has continued along similar lines to those outlined in my previous report. Our two senior pathologists have combined in a systematic study of milk samples from herds in the neighbourhood of Toronto, the objective being to obtain a combined bacteriological and pathological picture of bovine mastitis. We have been fortunate in again having the assistance of Dr. LeGard who has examined clinically the udders of the cows. It will be obvious that this method of attack offers greater possibilities of interpretation than comparable data and observations but obtained from different groups of cows and by separate specialists. A limited amount of histological study of the normal udder and udders carrying various types of infection has been done. It is difficult to analyse and interpret the characteristics of the pathological condition without a clearer picture of the normal, healthy udder. Equally it seems inadvisable to consider treatment of a bacteriological disease without previous consideration of the location and nature of the foci of infection. Already the work done suggests that irrigation of the udder offers little chance of reaching or destroying organisms high up in the walls of ducts.

Before we can devote more time to the question of cures it has seemed wise to concentrate on methods for diagnosis. Mastitis is a disease which under certain conditions spreads rapidly through a herd. Control measures clearly depend on early and accurate diagnosis. Our aim is to determine by these tests the most simple and reliable method, with the hope that it may be used with the greater confidence by the practising veterinarians. The herds of the Province are in their hands and a test to be of any value must meet the conditions of general practice. Concerning this phase our tentative findings are as follows:

If we accept the microscopic examination of a centrifuged sample of milk as the standard, then the other tests used in the laboratory have given the following: (a) cultural methods failed to detect infection in 8 per cent. of cases; (b) bromthymal blue and rennet coagulation in 28.7 per cent; (c) clinical examination in 19.2 per cent., or in other words this percentage of infected cows did not show detectable lesions. There is a possibility that the microscope may lean in the direction of casting doubt on some clean animals, but so far this method stands out clearly as the one which in our work has not failed to detect the positives which are confirmed by cultural and other methods.

From a practical point of view therefore the question at once arises as to whether the methods and criteria, chiefly the types of cells shown in a stained smear, of the microscopic examination can be made available to the profession and used by them. At this point I should like to summarize the work upon which my colleagues' conclusions are based. Twenty-one herds containing 461 milking cows have been examined. This has involved the detailed study of approximately 3,800 samples of milk. Of these animals 41.2 per cent. showed definite evidence of mastitis, 9.7 per cent. were doubtful. Of the 232 cases of mastitis, 65.5 per cent. were due to streptococcic infection, 22.8 per cent. to staphylococcic infection.

The extent to which the disease spreads is suggested by the fact that in first-lactation animals the degree of infection was 13.6 per cent. compared with 49.4 per cent. in the group of older animals.

In closing the section of my report dealing with bovine diseases I must refer briefly to an earlier piece of work performed by this Foundation. Since the staff transferred their attention from bovine abortion to mastitis some 2 years ago, we have watched with interest the subsequent history of the Schomberg abortion-free area. It is with very real pleasure that I report that the area is still clean. This is wholly due to the loyalty of the farmers, their confidence in Dr. Macleod, the local veterinarian, and his self-sacrificing devotion to this important piece of public service.

Parasitology: Preliminary experiments on the treatment of lambs from western Canada for the fringed tape-worm were concluded in March. Two of the remedies, male-fern and carbon tetrachloride, were ineffective in removing the parasite. A 1 per cent. solution of copper sulphate and "black leaf 40" given in two doses of 2 and 3 oz. respectively with an interval of one month between treatments, gave indications of being a useful treatment. A group of 25 lambs treated in this manner contained at the close of the experiment one infected animal. The control group contained 8 infected animals. This procedure should be repeated with larger groups of lambs before any final conclusion is permissible.

The study of the destruction of parasites in lambs reared in Southern Ontario has been continued. In all, the viscera of 146 animals have been examined, and definite identification of 15 genera and 17 species of parasites made. These are with two exceptions widely distributed throughout the area. In some species there is a seasonal rise and fall in the number of parasites found per animal. So far we have not encountered any serious pathological cases attributable to parasitic infestation. There is also no evidence as yet of any localities specially infested with sheep parasites. Preliminary experiments have been conducted to determine whether or not the larvae of several of the parasites are destroyed by temperatures which prevail during an average winter. For this purpose a temperature of 10°F was selected. So far we have found that certain larvae survive an exposure of two weeks whilst others are destroyed in four days. This work is being continued and higher temperatures used in order to obtain more critical death-points for several of the more important species.

An attempt has been made to correlate the distribution of different species in the small intestine of the lamb with differences in the reaction of the host's intestinal contents.

All of which is respectfully submitted.

Faithfully yours,

H. B. SPEAKMAN,
Director.

Appendix A

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Appendix B

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Research Fellow—L. J. Chapman, B.S.A. (Tor.)

Appendix C

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Appendix D

ONTARIO RESEARCH FOUNDATION

Exhibit "A"

BALANCE SHEET

As At December 31, 1936

ASSETS

Cash in Bank and on Hand:			
In The Canadian Bank of Commerce:			
Trust Bank Account	$25,619.96		
Operating Bank Account	12,694.39	$ 38,314.35	
Petty Cash		22.74	$ 38,337.09
Investments—At Cost:			
Bonds:			
Canadian Trustee Bonds	$2,840,011.67		
Canadian Public Utility Bonds	199,019.57		
Miscellaneous Bonds	165,783.86		
Total Bonds	$3,204,815.10		
Accrued Interest thereon to December 31, 1936	39,891.21	3,244,706.31	
Stocks:			
Industrial and Sundry Stocks	178,324.13		
Mining Stocks	180,766.25	359,090.38	
Total Investments			3,603,796.69
Accounts Receivable		$3,733.81	
Less: Reserve		265.92	3,467.89
Automobile		795.15	
Less: Reserve		210.00	585.15
Stores and Containers			9,967.29
Advances			575.00
Prepaid Insurance			932.21
Fixed Assets (being owned by Ontario Research Foundation):			
Structural Additions and Alterations		$ 14,893.24	
Apparatus and Instruments		16,345.91	
Office Furniture and Fixtures		2,989.31	
Library		16,610.22	50,838.68
			$3,708,500.00

LIABILITIES, RESERVES AND SURPLUS

Accounts Payable			$ 819.92
Reserves:			
Reserve for Income Stabilization		$ 270,000.00	
Reserves for Replacement of Equipment:			
Structural Additions and Alterations	$16,876.04		
Apparatus and Instruments	42,373.31		
Office Furniture and Fixtures	4,605.65		
Library	7,731.84		
		71,586.84	
Total Reserves			341,586.84
Surplus:			
Subscriptions Paid			3,363,050.00
Income Surplus			3,043.24
			$3,708,500.00

Signed on behalf of Ontario Research Foundation:
RALPH SKELTON,
Secretary-Treasurer.

I have audited the books and accounts of Ontario Research Foundation for the year ended December 31, 1936 and I have received all the information and explanations I have required and I certify that, in my opinion and subject to my report, the above Balance Sheet is a true and correct view of the affairs of Ontario Research Foundation as at December 31, 1936 according to the information and explanations given me and as shown by the books.

All my requirements as auditor have been complied with.

January 18, 1937.

A. ELLIOTT ALLEN, C.A.,
Of Allen, Miles & Fox,
Chartered Accountants.

Exhibit "B"

ONTARIO RESEARCH FOUNDATION

INCOME AND EXPENDITURE ACCOUNT

Year Ended December 31, 1936

Income:				
Balance at January 1, 1936			$ 3,440.75	
Bond Interest:				
Received	$116,329.31			
Accrued	39,891.21			
		$156,220.52		
Dividends on Stocks		3,311.12		
Bank Interest		696.85		
Researches for Industrial Corporations		34,049.39		
Income Royalties		701.23		
Discount Taken		38.77		
U.S. Exchange		5.58		
Sterling Exchange		820.06		
Reserve for Doubtful Accounts not required		104.04		
			195,947.56	
				$199,388.31
Expenditure:				
Salaries:				
Laboratory Salaries	85,090.71			
Other Salaries	27,586.66			
		112,677.37		
Laboratory Expense:				
Chemicals	896.51			
Apparatus	1,598.14			
Other Supplies	4,473.96			
Travelling	3,588.96			
Sundry	3,677.76			
Special Grants	2,108.40			
		16,343.73		
General Expense:				
Bank Charges	90.64			
Brokers' Charges	170.25			
Extension Work	2,896.18			
Fuel	2,010.54			
Gas and Water	637.21			
General Expense	4,868.97			
Insurance	863.22			

Light and Power	1,541.04			
Office Expense	826.88			
Postage and Excise	308.60			
Patent Expense	1,420.54			
Repairs to Buildings	267.90			
Staff Annuity Account	1,795.68			
Telephone and Telegraph	982.64			
Travelling	227.09			
		18,907.38		
			147,928.48	
Depreciation:				
On Structural Additions and Alterations		2,401.07		
On Apparatus and Instruments		6,919.94		
On Furniture and Fixtures		684.88		
On Library		1,667.18		
			11,673.07	
Transferred to Reserve for Income Stabilization			36,743.52	
				196,345.07
INCOME SURPLUS AT DECEMBER 31, 1936				$ 3,043.24

PROVINCE OF ONTARIO

Department of

Northern Development

Report of Operations under The Northern Development Act, R. S. O. 1927, and The Colonization Roads Act, R. S. O. 1927

AND AMENDMENTS

For the Fiscal Year ending March 31st

1936

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 54

ONTARIO

TORONTO
Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty
1937

To:

THE HONOURABLE HERBERT ALEXANDER BRUCE, R.A.M.C., F.R.C.S., (Eng.),
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The Undersigned has the honour to present herewith Report on Operations under the Northern Development Act, R.S.O.. 1927, and amendments. for the Fiscal Year ended 31st March, 1936.

T. B. MCQUESTEN,

Minister of Public Works and Highways.
Minister charged with the administraton of
Department of Northern Development.

Department of Northern Development, Ontario,
Toronto, January 19th, 1937.

HONOURABLE T. B. MCQUESTEN, K.C., B.A., LL.B.,

Minister of Public Works and Highways, Ontario.
Minister charged with the administration of the
Department of Northern Development, Ontario.

Sir,

I have the honour to present herewith the Report on the construction and maintenance of roads and bridges and other operations, carried on under the provisions of the Northern Development Act, R.S.O. 1927, and amendments during the fiscal year ended 31st March, 1936.

R. M. SMITH,
Deputy Minister.

Department of Highways, Ontario,
Toronto, January 19th, 1937.

REPORT OF THE CHIEF ENGINEER

This report covers the period from April 1st, 1935, to March 31st, 1936. It is the first full period following the change in the Fiscal Year.

Section II (B), Roads and Bridges.

In many Districts, operations under this head consisted of the improvement of alignment or grade, and the stabilization of roads already constructed.

On all completed roads, the camps in use during construction were disposed of and the sites cleared.

New road construction was in general carried out under contract. The only Road Camps operated by the Department were in Districts where the relief situation still demanded the creation of opportunity for employment.

As in the past, the closest co-operation was maintained between the local Welfare Offices and the District Engineers, and in addition, during the period under review, District Representatives of the Department of Agriculture rendered valued co-operation in the inspection of Seed Grain.

A considerable mileage of Main and Secondary Trunk Roads were kept clear of snow during the winter, thus enabling Settlers to market their wood and farm produce to greater advantage and is a factor in reducing direct relief.

Direct Expenditure, Construction and Maintenace — Northern Development.

An unusually late Spring, accompanied by very wet weather, demanded a heavy expenditure for maintenance. Work accomplished under this heading is recorded in Appendix A, and in addition, the following miscellaneous items:

Bituminous Macadam, 8.31 miles; crushed stone retread, 12.24 miles; new road constructed, 45.87 miles; new roads gravelled, 78.74 miles; new gravel on old roads, 545.86 miles; stabilizing, 138.96 miles; 22 curves built on old roads, a total of 3.51 miles; roads widened, 11.19 miles; roads banked, 1.86 miles; shoulders built, 28.91 miles; rip rap laid, 9,971 cu. yds.; gravel stock piled, 26,087 cu. yds.; crushed stone stock piled, 48,600 cu. yds.; brush cut on 642.20 acres and 175.20 miles; grass and weeds cut on 1,312.60 acres and 379.10 miles; Corduroy laid, .06 miles; removed, .10 miles; ditches cleared, 532.84 miles; offtakes built, 17.30 miles; ditch excavating, 49,371 cu. yds.; 7 creeks cleared for a total of 1.33 miles; other drains, .46 miles; culverts cleared of ice, 4,168; of debris, 1,418; repaired, 499; guard cable used, 50,289 lin. ft.; highway guard built, 42,062 lin. ft.; guard rail erected, 54,093 lin. ft.; repaired, 46,146 lin. ft.; 10,411 posts used and 4,994 painted; bridges protected from ice, 20; dismantled, 25; piles driven, 8,021; concrete piers built, 12; standard signs erected, 1,072; repaired, 361; repainted, 986; lettered signs erected, 946; lake and river signs erected, 66; ferry trips, 41,194, for a total of 32,555 miles; timber cut, 532,200 F. B. M.; purchased, 2,366,622 F. B. M., and on hand, 713,869; 31 traverses surveyed for 419.25 miles; 23 curves for 72.40; miles; 6 drains for 4.49 miles; 71 railway crossings for 49.40 miles; 24.62 acres of gravel pits; engines overhauled, 24; trucks, 16; power maintainers, 37; tractors, 34; light power graders, 56; leaning wheel graders, 3; and passenger cars, 11; roads snow-ploughed, 3,551 miles.

Agreements — Northern Development.

Work under this heading is detailed in Schedule "B".

Unemployment Relief Work.

This, as in previous years, represents a major share of the departmental expenditure. The larger projects were carried out under contract, and when this was not possible, by Road and Settlers' Camps; Appendix "C" schedules the work by Electoral Districts and the following miscellaneous and complementary works were carried on at the same time.

New road constructed, 79.36 miles; new road gravelled, 109.33 miles; new gravel on old roads, 103.97 miles; 80 curves built; 236 curves banked on 30.20 miles; road widened, 3.00 miles; shoulders built, .20 miles; rip rap laid, 29,243 cu. yds.; gravel stock piled, 4,252 cu. yds.; 127.10 acres brush cut for 14.96 miles; 46.00 acres grass and weeds cut on 58.50 miles; 75.78 miles ditches cleared; 10.04; miles offtakes dug; ditch excavation, 40.67; 191 culverts cleared of ice; of debris, 21, and repaired, 75; guard cable used, 10,151 lin. ft.; highway guard constructed, 1,350; guard rail erected, 33,448; repaired, 950 lin. ft.; posts set, 5,366; painted, 593; bridges protected from ice, 1; dismantled, 2; piles driven, 586; standard signs erected, 132; repaired, 8; repainted, 10; lettered signs erected, 13; lake and river signs erected, 16; timber cut, 24,000 F. B. M.; purchased, 3,121,850 F.B. M.; 9 traverse surveys for 377.43 miles; 6 curve surveys for 20.27 miles; drains, 12.72 miles; 6 railway crossings for 2.00 miles; 7.86 acres of gravel pits; 4.00 acres of right-of-way.

Trans-Canada Highway.

The year was marked by the official opening, on July 1st, of the Trans-Canada Highway, between Winnipeg and the Lakehead Cities.

Maintenance and stabilization was continued on this section and its continuation to Nipigon, and the construction operations transferred to the White River-Nipigon Sections.

The Schreiber-Nipigon Section was completed and opened to traffic during the year. This was operated directly under the District Office.

The White River-Schreiber Section, in which five contracts were being carried out, was assigned to a Principal Assistant Engineer, and staff, with temporary Headquarters at White River.

Prior to the award of the Contracts on July 10th, Camps and tote roads, giving access to them from Railway Sidings, were constructed by the Department on a day labour basis. On the Contractors taking over, these men and additional, as required, were transferred from the Department payroll or were drawn from Municipalities by the Employment Service Branch of the Department of Labour.

Operation on this Highway is recorded under the District reports, and in Appendix "C," with the addition of the following miscellaneous works:

New road gravelled, 19.08 miles; new gravel on old roads, 77.20; stabilizing, 25.40 miles; rip rap, 63 cu. yds.; gravel stock piled, 1,540 cu. yds.; grass and weeds cut on 16.50 miles; ditches cleared, 43.00 miles; offtakes dug for 1.26 miles; ditch excavation spread for 1.41 miles; culverts cleared of ice, 102; of debris, 78; repaired, 11; guard cable used, 12,000 lin. ft.; highway guard erected, 1,760 lin. ft.; guard rail erected, 3,600 lin. ft.; and repaired, 7,970 lin. ft.; number of posts used, 304; and painted, 2,973; standard signs erected, 122; repaired, 51; repainted, 50; lettered signs erected, 78; lake and river signs erected, 3; traverse surveys, 24.89 miles; 77 curves surveyed for 9.74 miles; drains surveyed for 3.96 miles.

Seed Grain — Road Work Plan.

Observation through the Districts indicated that a vast number of industrious and deserving settlers were, for financial reasons, unable to plant a crop on their land. A plan was developed whereby Seed Grain was purchased, either from reputable dealers or from other Settlers, and furnished the beneficiary on his undertaking to work out the value of the seed on the roads when called on by the District Engineer.

Except for certain varieties of grain not considered economically sound at the time, the Settler was free to stipulate the variety of his crop. At the same time, and as a condition to the Agreement, the settler was required to plant and cultivate a vegetable garden of a size and character mutually agreed between himself and the representative of the Department of Welfare.

It is a satisfaction to note that the plan has proved a success and that there is a public demand for its repetition in the ensuing fiscal year.

Location and Surveys.

All location and survey work was under the direction of a Chief Locating Engineer. At the commencement of the year the survey headquarters was at Sault Ste. Marie, but in September it was transferred to Toronto. In the same period the number of parties in the field increased from seven to seventeen, each party averaging twenty men.

Parties operated in all Districts except Rainy River, and an aggregate of 1,032 miles of location was completed including bridge sites, railroad crossings, and where advisable, alternate projects, with complete data on which to base a section.

Major projects comprised the relocation and revision of the Ferguson Highway north from North Bay, the North Bay-Sault Ste. Marie Trunk Road and of proposed extensions of the Trans-Canada Highway.

Extensive surveys were made in the Red Lake and Little Long Lac areas. Aerial photographs were employed and proved of high value.

Summary of Location Surveys.

	Miles of Location	
Electoral District	First Class Roads	Secondary Roads
Muskoka	12	0
Nipissing, Sturgeon Falls, Renfrew North	109	39
Sudbury	49	47
Sault Ste. Marie	70	0
Temiskaming	18	13
South Cochrane	61	0
North Cochrane	0	42
Fort William and Port Arthur	97	81
Kenora	0	165
Rainy River-Fort Frances	0	0
Algoma-Manitoulin	200	0
Parry Sound	29	0
Totals	645	387=1,032

DISTRICT REPORTS

No. I—Muskoka—E. J. Hosking, Huntsville.

Northern Development.

Apart from ordinary maintenance work of gravelling and dragging on all main leading and trunk roads, No. 11 Highway was given a seal coat for an aggregate distance of 13.5 miles, to seal patches and improve traction in wet weather.

The Huntsville-Dwight road was stabilized with calcium chloride a distance of 13.5 miles, resulting in a hard dustless surface.

The Bracebridge-Port Carling Road for a distance of 16 miles was stabilized in a like manner, with the exception of about seven miles where common salt was substituted for calcium chloride.

The Bracebridge-Dorset Road was treated with dust layer a distance of 33 miles.

On the Gravenhurst-Bala Road, those portions which were completed were given the first coat of Bituminous gravel mulch a distance of 9 miles. The balance of the road, about 6.5 miles, was treated with dust layer.

In addition, a grant was made in each Township from Northern Development Funds to improve the most important roads.

Unemployment Relief.

Work under this heading was mainly improving existing main leading and township roads, such as cutting down humps, improving drainage and improving visibility on curves. The men employed were assigned by local relief officers and rotated to schedule.

The construction of the Huntsville-Baysville Road was continued and grading to a distance of six miles east from Huntsville completed. The right-of-way for the remaining eight miles was cut.

The re-construction of the Gravenhurst-Bala-Parry Sound Road was continued by contract on the section between Gravenhurst and Bala. To date about 12 miles of new grade has been constructed.

Surveys.

Survey work in this district consisted of the location of a possible new route of the Gravenhurst-Bala-Parry Sound Road between Bala and Parry Sound. The party on this survey worked in conjunction with another in the Parry Sound District. Twelve miles of location were run.

No. II—Nipissing, Sturgeon Falls and Renfrew North—C. Tackaberry, North Bay.

Maintenance.

In the main, operations under this head consisted of re-gravelling and repairing trunk and main feeder roads, repairing bridges and culverts, and snow ploughing the main arteries during the winter months.

Construction.

Three new creosoted timber bridges were completed in the District. The largest, with a 30 foot deck, on the North Bay-Sudbury Road, spans Duchesnay Creek. This consists of a 105 foot deck truss and approaches. Due to its location, one half mile west of North Bay, and the importance of the Highway, some ornamentation was added to improve the usual lines of a timber structure.

On the Warren-Rutter Road, over an arm of the French River, a 400 foot trestle was erected, and on the Temiskaming Road, a truss bridge with trestle approaches.

Some major improvements to roads were carried out on Highway No. 11. Tower Hill Diversion, one mile in length, and Martin River Diversion, .7 miles in length, will open to traffic in May. On the same highway, two rock cuts and a diversion around a sink hole, which had been commenced under the Unemployment Relief Scheme, were completed under Northern Development expenditures.

Unemployment Relief.

Employment on construction under this expenditure was provided by a diversion .3 miles in length, East of Duchesnay Creek Bridge, on the North Bay-Sudbury Road, and on the Warren-Rutter Road, and a new timber trestle, 150 feet in length, over the Wolseley River. Under this head also was the distribution to farmers of the District of 11,800 bags of grain and 23,200 lbs. of grass seed.

The grading on the balance of the road between Dwight and Algonquin Park Station was completed. Approximately 20 miles was given a light coat of gravel. A creosoted timber bridge over the Oxtongue Lake was completed and opened for traffic.

A road was built into Canoe Lake portage from the main road, a distance of .41 miles, to provide access for summer residents, and a parking space cleared at Tea Lake Dam, approximately .5 acres, to provide accommodation for tourists' cars.

Three sets of camps were demolished and the sites cleared.

The construction of the road between Lake of Two Rivers and Whitney was commenced by contract and about 5 miles of grading completed.

Surveys.

Both the Ferguson Highway North from North Bay, and that section of the North Bay-Soo Highway lying within the District, were relocated in their entirety. Forty miles of location were run on the former, forty-eight miles on the latter. Twenty-one miles of location of the proposed Sudbury-Britt-Parry Sound Highway was also run during the year. Location work, on other than main roads, consisted of the location of twenty-six miles on the proposed Mattawa-Temiskaming Road and thirteen miles on the proposed Chudleigh-Afton Mine Road.

Trans-Canada Highway.

Expenditures were under both day labour and contract. Under the former, the old concrete bridge over Boom Creek, at the westerly entrance to Mattawa, was removed and replaced by a timber structure on concrete abutments.

Under contract, 17 miles of the North Bay-Pembroke Section were stabilized in the vicinity of Mattawa. A late commencement and unfortunate weather prevented a greater mileage being recorded.

At Bissett's Creek, a cut and fill on the westerly approach improved both grade and alignment. Also, in the same vicinity, 15,000 yards of gravel were stock piled from a pit two miles to the South.

Stabilization.

Stabilization work was also carried out under day labour. In the vicinity of Meadowside, on the North Bay-Sudbury Road, four miles were treated with satisfactory results. An experimental section, 1.4 miles in length, adjoining the City pavement of North Bay, was treated in alternate subdivisions by Calcium Chloride and Sodium Chloride.

No. III—Sudbury District—A. M. Mills, Sudbury.

Northern Development.

A site was acquired, and a new machine shop constructed by day labour. The location is outside the dense City traffic, but accessible to all trunk roads.

During the winter main trunk roads were kept snow-ploughed, a feature that elicited a satisfactory public reaction.

Stabilization treatment was applied to the Sudbury-Falconbridge Road.

All equipment was overhauled during the winter months.

Unemployment Relief.

Under this expenditure, seven Road Camps were in operation for varying periods. Two in the North Bay-Soo Trunk Road were closed out in May. One Camp, in Awrey Township, completed a diversion eliminating a dangerous series of curves. Another, in Dryden Township, near Wanapitae, operated on rock cuts and on a new diversion.

Sudbury.

Two Road Camps, on the Chapleau-Iron Bridge Road, operated during the winter and were also closed out in May. This road is now cut to Mileage 53 from Chapleau, stumped to Mileage 48, graded to Milage 44, and gravelled to Mileage 43. Another Camp, at Rock Lake, operated in the Township of Jack until May.

Surveys.

Relocation of that section of the North Bay-Soo Highway, in Sudbury District, totalled forty-nine miles. At the end of the fiscal year the party running this relocation was still in the field. On the proposed Sudbury-Timmins Road forty-seven miles of location were run.

N. IV.—Sault Ste. Marie—R. A. McAllister, Sault Ste. Marie.

The work performed during the fiscal year 1935-36 was under the following headings: Department of Northern Development; Regular Work; Unemployment Relief, General Work, and Trans-Canada Highway Construction.

Department of Northern Development, Regular Work.

Township Agreement work was carried on in the four organized townships in the District, the arrangement proving very satisfactory in improving the various roads and assisting the townships in cutting down on their Relief costs. Stabilization of Trunk and Branch Trunk Roads was carried on very satisfactorily. The ditches and sides of the roads were kept clear of weeds, and guard rails were constructed extensively along dangerous curves and ditches. The pavement east of Sault Ste. Marie was maintained with cold patch. Numerous culverts were replaced and new ones placed to improve the existing road drainage. Gravelling was carried on over the main roads and some township roads and large stones removed. During the winter months the main roads were kept ploughed through a winter having more than the average snowfall. The new truck, purchased for this purpose, was used effectively. Bridges on the Second Line were widened to the width of the roadway, eliminating many danger points on this road. Other bridges were maintained and repaired satisfactorily. Some Road Construction work was carried on in the Michipicoten area.

Unemployment Relief—General Work.

The Road Camps on the Soo-Batchawana-North Branch Trunk Road were closed, and the equipment checked and stored. Culverts for use on this road were stored at Mamaise and a powder house built there. Surveys were operated during the winter from Carp River north to Montreal River, running new lines, making cross-sections and eliminating curves in the right-of-way. Some Settlers' work was carried on along the Branch Trunk Roads for benefit of unemployed men adjacent to the operations. A small amount of this work was also carried out on Township roads, assisting the Settlers and improving their roads.

Trans-Canada Highway Construction.

The Road Camp at Mamaise was opened during the Spring of 1936. The road from Soo to Mamaise was kept ploughed to facilitate the hauling of supplies.

Surveys.

Survey work in this District was confined to the location of the Soo-White River Section of the Trans-Canada Highway. Seventy miles were run during the year and one party was still in the field at the end of the year.

No. V—Temiskaming—D. J. Miller, New Liskeard.

Contracts.

A contract for retread surface was completed and consisted of laying 8.24 miles, part of which was between Cobalt and Latchford, and a short length immediately North of New Liskeard.

Three bridges were built under Contracts on the Matachawan Road. These were all preframed creosoted timber structures carrying a 24 ft. roadway and designed for 20 ton loading. These bridges all replaced old pioneer structures that were unsafe for the heavy traffic now on this road.

A Contract was let for placing crushed gravel on seventeen miles of Highway No. 11. It commenced at the south boundary of the District and extended North from this point. The bulk of 11,336 cu. yds. was placed on the roadway, but stock piles were also left at convenient points for future use.

Day Work Labour.

The largest item carried out by Day Work was the erection of the LaRose Bridge in Cobalt, over the T. & N. O. Railway. The foundation and substructure is of concrete, carried down to solid rock. The approach spans are of reinforced concrete, and the centre span, over the Railway, is a specially designed deck-truss of creosoted timber. Except for a few key men, this work was done by rotating labour to give employment to the greatest number possible.

The Wawbewawa Bridge in the Township of Marter was commenced but was not completed at the end of the fiscal year. This was the only other major bridge construction, but two other small structures were built by day labour during the year.

Other work consisted of repairs to 30 bridges, ditching and gravelling on trunk and other roads throughout the District. From Englehart South on Highway No. 11, 7.3 miles of Calcium Chloride stabilized surface was laid.

Full time maintenance was carried out on 234 miles of road, and part time maintenance on 155 miles of road.

Fourteen Organized Townships and one Village, made Road Agreements with the Department, whereby they received 50% of their road expenditures from the Government.

Unemployment Relief.

During the winter of 1934-35 Three Road Camps were opened to absorb unemployed men in Cobalt, Haileybury, New Liskeard and the Townships of Bucke and Coleman.

The work consisted of revisions in alignment on Highway No. 11 between Latchford and the South Boundary of the District. While most of this work was done during the previous fiscal year, they were still operating, and continued with a gradual reduction in labour, until June, 1935.

Throughout the District a programme of work was carried out mainly to give employment where the need was greatest. It consisted of Clearing, Stumping, Ditching, Gravelling, mainly on Settlers' Roads, and repairs to three bridges.

Surveys.

During the year the Ferguson Highway was relocated for a distance of eighteen miles, with the party still in the field at the end of the year. Another thirteen miles on the proposed Chudleigh-Afton Mine was also run.

No. VI—South Cochrane—A. T. Hamer, Matheson.

Northern Development.

The major item under this heading was Maintenance of Main and Secondary Roads. The Timmins Trunk Road was stabilized from Schumacher to the Pamour Mine and a number of bridges repaired.

Unemployment Relief.

The appropriation under this heading was expended on Township roads, and in constructing or replacing Township Bridges, and the Frederickhouse River Bridge on the Timmins-Trunk Road, with a total length of 370 feet, including two 90 foot trusses.

The most important road work was on the Goodfish Roads, the Swastika Matchewan Road and the South Porcupine-Timmins South Road.

Surveys.

The Ferguson Highway in this District was relocated for a distance of sixty-one miles. The party running this relocation was still in the field as at March 31st.

No. VII—North Cochrane—D. A. Maciver, Cochrane.

Northern Development—Construction and Maintenance Bridges.

All bridge construction was confined to Township Roads. Eight timber structures were erected and two additional nearing completion.

Stabilization.

Due to a late commencement and adverse weather only five miles of Highway No. 11 South from Cochrane were treated. A portable gravel crushing plant utilized in the early season for general maintenance was later used for stabilization.

Construction.

A survey extending along the Cochrane-Hearst Road for Ninety miles was completed during the year. On this will be based future expenditures to improve alignment, grades and drainage.

At Smooth Rock Falls, a half mile diversion was completed. This was for the purpose of giving a safer and more convenient approach to the dam crossing of the Mattagami River.

At a location six miles West of Cochrane another half mile diversion eliminated two dangerous right angled turns that had for long been a hazard.

Maintenance.

A late Spring, with unusually prolonged wet weather, made maintenance a heavy item in the early part of the year, with a consequent depletion of appropriation. This necessitated its reduction to a minimum in the Fall and eliminated all snow ploughing during the winter.

Under Municipal Agreement one Township carried out Winter gravelling. The ratepayers of two school sections, given special grants by the Department of Education, carried out road work to the value of the grant under the supervision of this District Office.

The Ground Hog and Abitibi River Ferries, after a thorough overhaul, were in almost continuous service during the season.

Unemployment Relief.

A road Camp at Mile 275 Algoma Central Railway, and operating on the Hearst-Horne-Payne Road, carried out gravelling operations during the month of April and part of May.

Settlers' Camps had been working on Township Roads during the winter, and were continued in operation, until about the end of April.

Under the Road Work plan, recipients of Seed Grain worked out the amount of their grants during the Summer months and early Fall.

Surveys.

In this District the location of a road between Cochrane and LaReine on the Quebec Boundary was undertaken. Though uncompleted at the end of the year a total of forty-two miles had been run.

No. VIII—Fort William-Port Arthur—E. Smith, Fort William.

Statutory Unemployment Relief (Settlers' Camps).

Considerable road work was carried on under the above schedule during the year, there being three camps on the Shebandown Road, three on the Gunflint Highway, and one on the Dawson Road. These Camps were closed in May, 1935, the men being transferred to Camps on the Trans-Canada Highway.

Besides the above, there were two road parties of sixty men each. These men were all returned soldiers, and residents of the Cities of Port Arthur and Fort William. They were known as the Legion gangs, the Port Arthur men being employed on the Dawson Road, and the Fort William men on the Fifth Sideroad in Paipoonge. This arrangement has been operating for a number of years and has proven mutually satisfactory.

Northern Development.

Under this fund, the completion of the paving of the International Highway was of first importance, as this road is used by tourists entering this District.

Work was also carried on during the year on a large number of Township Roads, and the policy of widening, regrading and gravelling a certain mileage of the important secondary roads in the District each year was adopted with satisfactory results.

In addition to the above work, maintenance was kept up on all roads under the Department, there being nine power maintainers and a number of team graders in use throughout the Summer. Necessary repairs were also made to bridges, and a number of new bridges erected; one 60 foot span over the Slate River, constructed of creosoted timber. A creosoted timber bridge was constructed over Little Long Lac, and a road from Geraldton to the Little Long Lac Mine completed, also the necessary survey and plans prepared for the extension of this road to the other mines which are being developed in this section.

The winter of 1935 was the first winter the Department recognized the importance of keeping the Highways in the District open throughout the winter months, there being one Department plow and two rented plows employed throughout on this work.

Seed grain was supplied to 548 Settlers, with the result that a much larger acreage was placed under cultivation than in previous years.

Trans-Canada Highway.

Work was commenced on that section of the Trans-Canada Highway between Schreiber and White River in the Fall of 1935, the Department constructing the necessary camps. Contracts were let for the work on five sections, and throughout the winter 2,700 men were employed on this work.

On the section of the Trans-Canada Highway from English River to Fort William, the Department operated nine camps to July 31st, 1935, when it was placed on a contract basis; the contractors taking over all men, equipment, and camps. This consisted of gravelling, widening, elevation of curves and the construction of culverts. The work was closed down in the Fall, with the exception of two camps which worked through the winter widening rock cuts.

A contract was also let for stabilizing that section of the Trans-Canada Highway between Fort William and Kakabeka Falls, known locally as Arthur Street. The contractor completed seven miles of this contract before closing for the winter.

On that section of the Trans-Canada Highway between Port Arthur and Nipigon, the Department operated two camps while completing the gravelling and shouldering. These camps were both closed in the early Fall.

On the thirty-eight mile section of the Trans-Canada Highway between Schreiber and Nipigon, the contract was completed and open to traffic by the Autumn. Seven camps were in operation in this area.

The Department also operated two Day Labour Camps, one at Rossport, and the other at Sand Lake, the men being employed on widening and relocating the existing road. Both these camps were closed in the Fall of 1935.

Surveys.

During the early part of the year parties were in the field locating the White River-Schreiber section of the Trans-Canada Highway. Ninety-seven miles of location was run by the middle of August, at which time construction was started. The six miles of the Trans-Canada Highway between Selim and Rossport was relocated, and on the proposed Nipigon-Geraldton Road, a total of eighty-one miles was run during the year, with the survey still in progress.

No. IX—Kenora District—E. A. Kelly, Kenora.

All work in the Kenora District during the Fiscal Year was performed under three Expenditure classifications, namely: Northern Development, Statutory Unemployment Relief and Trans-Canada Highway Unemployment Relief.

Northern Development.

The works carried on from Northern Development Funds are chiefly administrative. maintenance and snowploughing of main roads throughout the District, and the construction of a small mileage of Settlers' roads. An approximate distribution of the funds for these items is as follows: Administrative 20%, Maintenance and Snowploughing 40%, and Road and Bridge Construction 40%.

Statutory Unemployment Relief.

All moneys from this fund were expended on new road construction, chiefly on main trunk roads, with smaller amounts on secondary trunk roads. The chief projects carried out under this classification were as follows:—

Sioux Lookout-Dinorwic Road.

At the opening of the fiscal year the Department had seven day labour camps in operation. These camps were kept open for five months and a contract was then awarded to complete the grading from a point seventeen miles from Sioux Lookout to a point thirty-five miles distant.

Hudson-Sioux Lookout Road.

From April to August the Department operated two day labour camps. In August these were closed down and a contract awarded to complete the grading of a six mile section at the Sioux Lookout end of the road. At the end of the fiscal year it was only partly completed.

Kenora-Fort Frances Highway.

The most important expenditure from the Statutory Unemployment Relief Fund was on this road. The contractors operated on a 40 mile section from Andy Lake to Crow Lake for the full fiscal year; under a contract awarded in Fall of 1934. In January a further 6 mile section was opened from the junction of the Trans-Canada Highway to Blindfold Lake, as an extension to their previous contract. Work on this extension was carried on to the end of the fiscal year and approximately 30 per cent was completed.

Redditt Road.

A large Settlers' group worked through November and December on a revision of the Redditt Road, half a mile north of the Town of Kenora. Due to lack of funds this work had to be suspended and the work left uncompleted.

Trans-Canada Highway—Unemployment Relief.

Under this scheme the Department operated 16 day labour camps. These camps were kept open for various lengths of time between April and October, but on an average basis the 16 camps operated for 3½ months. At the end of October all day labour work had been abandoned and work proceeded under contract.

On the Kenora-Manitoba Boundary Section, the Contractor operated for the full fiscal year on a contract awarded in 1935. At the end of the fiscal year there remained four months work to complete this section of the road, excepting two bridges which were not included in the Contract.

Another Contractor continued work throughout the full year, grading and gravelling the section from Vermillion Bay to Kenora. At the end of the fiscal year about 2½ months of work remained to be completed.

In July two contracts were awarded for the grading of the section from Dyment to Vermillion Bay. As much of this section was not suited for winter work little was done, and at the end of the fiscal year only a small percentage had been completed.

In the same month another contract was awarded, calling for the widening, surfacing and ditching of the section from English River to Dyment. Work proceeded for four months until cold weather set in. The work was left uncompleted, the Contractor intending to finish the work in the following season.

Surveys.

The location of two routes, one from Kenora, the other from Quibbell into the Red Lake mining field was undertaken. During the year seventy-one miles on the Kenora route and forty-two miles on the Quibbell route were located. On another mining road, Dog-Hole Bay to the Pickle Crow Mine, another twenty-three miles of location were run. Surveys were also made to connect Kenora with Minaki and Malachi. These accounted for another twenty-nine miles of location. As the year ended another party was sent into the field to relocate parts of the Kenora-Fort Frances Highway.

No. X—Rainy River—G. H. Lowry, Fort Frances.

All work in the District for the fiscal year is under two heads, Northern Development Construction and Maintenance, and Unemployment Relief.

Northern Development.

During the winter months all Main and Secondary Trunk Roads were kept open as in the past. At the District Office all mechanical equipment was given a thorough overhaul.

During the summer months all gravel roads were patrolled regularly. Three timber bridges were completed and two others are in the course of erection. New construction in the form of widening and straightening was conducted at needed points, as well as general maintenance, regravelling, weed and brush cutting and repairs to bridges and culverts. Twenty-one miles of Stabilization was applied to trunk roads.

Municipal agreements were carried out by twelve Municipalities and four Townships operated under the Statute Labour arrangement. In each, useful work was accomplished.

Unemployment Relief.

On the Kenora-Fort Frances Highway, two road camps of 125 men each operated. One of these was located in the Kenora District, but was administered by this office. This camp closed on May 15th, for the summer, but opened for two months in the Autumn to complete its programme.

To improve the transportation facilities to the Straw Lake area, a Dam was built at the head of Clearwater Lake which eliminated three portages, and at three others, Marine Railways were constructed.

No. XI—Algoma-Manitoulin—R. G. Sneath, Blind River.

Algoma.

The work performed during the Fiscal Year 1935-36 was under the general headings: Department of Northern Development, Regular Work; Unemployment Relief, General; and Trans-Canada.

Department of Northern Development, Regular Work.

Under this heading is included work done under Agreement with twelve Townships. The Soo-Sudbury Road was maintained throughout the season, using mechanical maintainers and Tractor-drawn multiple-blade drags. Casual dragging was carried out on secondary and main leading roads when required. A limited amount of side brushing and ditching was also performed, but due to reduced appropriation only that absolutely necessary was undertaken. Some stabilizing was carried out on the Echo Bay-Shewfelt Section of the Trans-Canada Highway, and also through the more important Towns and Villages, to minimize the dust nuisance. A special campaign was carried out on the west end, and St. Joseph Island, with regard to placing of directional signs. Considerable work was also done under this heading on the Soo-Sudbury Road, but much remains to be carried out before it can be said to approach efficiency. A small amount of gravel was stock-piled along the Trans-Canada during the Winter to be spread in the following year. Pine Island and Kensington Point Ferries were operated as usual and arrangements were made to replace the former during the coming year. Snow-ploughing was carired out on the Soo-Sudbury Road, using hired trucks with Department or privately owned snow plows. The Soo and Sudbury Districts co-operated whenever possible in keeping this Main Road open so that it was not blocked for any length of time. A number of bridges were repaired, in some cases the work being rather extensive. Two creosoted timber bridges were constructed on the Desbarats Diversion of the Trans-Canada Highway. The Department Office, Storage and Machine Shop, at Blind River, was completed and equipped early in the year.

Unemployment Relief.

General work under this heading was performed in sections where the people would be most benefited, but was necessarily limited due to reduced appropriation. In the same period work was performed on the Trans-Canada Highway, the Road Camp at Desbarats being operated for part of the period, also a Settlers' Camp East of Webbwood for a shorter period. No new road constructed under this heading was opened to traffic. A small amount of assistance was given Settlers in Townships by providing work to improve existing roads.

Manitoulin.

Work was performed under the Department of Northern Development, Regular Work Account, and included Municipal Agreements in most of the Townships on Manitoulin Island proper. A limited amount of work was done on Unemployment Relief, General Work Accounts.

Department of Northern Development, Regular Work.

The Soo-Sudbury and Espanola-Little Current Road, as well as the Manitoulin Island belt line, was maintained with mechanical and horse-drawn equipment, two new mechanical maintainers being placed in service on the Island proper.

Side brushing, gravelling and spreading of clay was carried out, and a very limited amount of ditching done.

Repairs to bridges were executed as necessary, some old bridges being found to be in a condition closely approaching the dangerous stage.

The Ferry "Jacquelin" was operated for the entire open-water season, between La Cloche Island and Little Current.

Unemployment Relief.

A Road Camp was operated for part of the period on the McKerrow Diversion, Trans-Canada Highway.

Other relief work was performed in various parts of the District. It is to be noted in passing, that very little direct relief has been required on Manitoulin Island proper, and our expenditures under Unemployment Relief, General Work, have been so placed that direct relief expenditures have generally not been found necessary.

Surveys.

In this District survey work was confined to the relocation of the North Bay-Soo Highway. With the survey parties still in the field at the end of the year, two hundred miles of relocation has been run.

No. XII—Parry Sound—R. E. Richardson, Parry Sound.

General Work—Unemployment Relief.

Major construction work under this Plan was confined to Road Camps, which operated for about nine months. One camp, on the revision South of Parry Sound, eliminated two railway crossings, and four camps, on the Parry-Sudbury Road, worked between Nobel and Byng Inlet. Each employed 100 men, who were rotated accordingly to schedule. The unemployment relief situation was thus relieved to the extent that very little Direct Relief was required. Approximately 14 miles of 24 foot roadway was constructed by the Road Camps, and an additional 2.6 miles by Settlers' Groups. All construction work was heavy owing to the amount of solid rock encountered.

Regular Northern Development.

A contract was let for crushing and laying the 3 inch consolidated pre-mix retread surface between Burk's Falls and Sundridge. As this work was commenced late in the season only 4.0 miles were completed. Local labour was employed and rotated, and the employment situation relieved in that area.

One 45′ creosoted timber bridge with heavy approach fill was constructed, and the material purchased and placed on the ground for 3-45′, 1-60′. 1-75′ and 1-90′ spans.

Maintenance.

The season for dragging operations was unusually long, extending into the early part of December. 66 miles of gravelled surface were treated with dust preventative during the summer, and a few miles stabilized; main and secondary trunk roads were ploughed and kept open to traffic. 14,000 cu. yds. of gravel were stock piled. during the winter months.

Surveys.

The party running the proposed revision of the Gravenhurst-Bala-Parry Sound Road in conjunction with the party in Muskoka District located fourteen miles of road. On the proposed Sudbury-Britt-Parry Sound Road another fifteen miles of location was run.

Appendices.

Appended to this report are schedules of work under each authorized expenditure. also a recapitulation of all work performed.

W. B. Hutcheson,
Acting Chief Engineer,
Department of Northern Development.

COLONIZATION ROADS BRANCH

REPORT OF THE ENGINEER

Expenditures, approved under authority of the Colonization Roads Act, were made during the fiscal year in the Electoral Districts of:—

Addington
Hastings East
Hastings West
Lanark
Leeds
Muskoka
Nipissing
Parry Sound
Peterborough
Renfrew North
Renfrew South
Simcoe Centre
Simcoe East
Victoria

All work carried out in the Municipalities and unorganized Townships in these Districts was under the supervision of the Department Engineers; the District Engineers at Huntsville, North Bay and Parry Sound, and the Division Engineers at Kinmount, Madoc and Barry's Bay.

Construction and Maintenance.

Expenditures under this head were for the acquiring of right-of-way on main roads, fencing, and damages to property sustained through construction operations. In addition, grants were made for the construction and maintenance of Township Roads in 90 organized municipalities and 26 unorganized townships.

The work accomplished is scheduled in Appendix E.

By-Law Work.

110 Municipalities passed Colonization Roads By-Laws whereby the Department contributed 50% of the cost of carrying out the work and the purchase of equipment. Work performed is recorded in Appendix B 2.

Unemployment Relief Work.

Expenditures for the construction and maintenance of a number of main roads in the Colonization Roads Area were continued with an allotment provided from the unemployment relief funds of the Department of Northern Development. The work was carried out at first by day labour and a number of Road Camps were erected for the accommodation of the men employed. In June, 1935, owing to the necessity of curtailing expenditure, the Road Camps were closed down and the work carried on by local settlers' groups in a most efficient manner until they also closed in November.

The reconstruction of main roads in this area is a matter of extreme necessity. Built, as they were many years ago, as colonization roads, they were quite unsuited to present day traffic conditions.

The benefits derived from their reconstruction, as noted on completed sections, have been reflected in a marked increase in tourist business, and in industrial development, particularly lumbering.

The most important main roads in this area are the Rosedale-Minden-Dorset; Minden-Haliburton; Monck Road; Bobcaygeon-Kinmount-Minden; Bobcaygeon-Buckhorn-Burleigh Falls; Burleigh Falls-Apsley-Bancroft; Madoc-Bancroft; Maynooth-Combermere-Barry's Bay; Kaladar-Denbigh-Dacre-Eganville; Pembroke-Barry's Bay; Lake Dore-Golden Lake-Barry's Bay-Whitney; Maynooth-Whitney; Maynooth-Madawaska and Calabogie-Lanark.

The work performed is shown in Appendix C for the Electoral Districts through which these roads pass.

Kinmount Division—Electoral Districts of Peterborough, Victoria, Simcoe Centre and Simcoe East—T. C. Swartman, Division Engineer, Kinmount.

All road camps operating under the Unemployment Relief Fund were closed by June and work carried on by Settlers' Camps until November, completing sections, where possible, of work commenced by Road Camps.

Rosedale-Dorset Road. With the exception of a half mile between Coboconk and Rosedale, which remains to be constructed; and from Miner's Bay to Dorset, which lacks a suitable wearing surface, this road is constructed and was maintained. A maintainer and power grader were employed throughout seasonable weather and traffic increased to such an extent, that on one day early in August, over one thousand motors passed through the Village of Minden. One bridge and its approaches remains to be erected at Twelve Mile Lake Narrows.

The Minden-Haliburton Road. A new timber bridge at Haliburton to replace the existing condemned steel and concrete bridge, was completed. There still remain a number of private approaches to be built.

The Lake Shore Road. From Kirkfield Bridge to Coboconk, with the exception of one mile at the Laidlaw Estate, this road is completed, spread with crushed stone and was maintained.

All necessary traffic signs on these three roads were placed, but they still require guard rails.

The Monck Road. This is the main artery between Orillia and Bancroft and the only feeder from the East and West, to the North and South Trunk Roads. Strategic sections were built at Dongola, Kinmount, Gooderham and Torry Hill, which will fit in to the general plan of the completed location.

Bobcaygeon Road—Bobcaygeon to Minden. Sections north and south from Kinmount were rehabilitated, and a short section south of Minden extended.

Burleigh Falls-Bancroft Road. A major diversion was completed between Apsley and Bancroft, and the Burleigh Falls-Apsley Section was maintained by a power grader throughout the year. The grade on the Apsley-Chandos Road, commenced the previous year by a road camp, was completed.

Two major diversions were completed on the Bobcaygeon-Buckhorn Road, and Buckhorn-Gooderham Road, the latter in the vicinity of Catchacoma Lake.

Trial sections, approximately eight miles of stabilized surfacing were laid, both with calcium chloride and with salt. These have proved very efficacious and apparently withstood frost action very well.

Lack of suitable natural wearing surface materials at adjacent points, reflects itself in the completed roads remaining to be surfaced. Given this, and completion of the trunk roads, this District should prosper through the influx of tourists and sportsmen.

Madoc Division—Electoral Districts of Addington, Hastings East and Hastings West—C. F. Szammers, Division Engineer, Madoc.

Hastings East. Work on the new diversion of the Hastings Road North from Millbridge was an extensive operation. Six road camps operated until the latter part of May when they were closed, but some groups of local men, about twenty in each, continued the work. The progress was very satisfactory.

Hastings West. This District shared with East Hastings in the work in the Hastings Road Diversions, North of Millbridge.

On the Crow Lake Road, in the vicinity of Marmora, a diversion was completed, and is a distinct contribution to the improvement of this road.

Addington-Frontenac. Four Road Camps on the Addington Road, and two on the Sharbot Lake-Lavant Road, which operated during the previous winter, continued until the end of May. Six groups of local settlers of about twenty men each then took over and completed these sections of the road.

Barry's Bay Division—Electoral Districts of Renfrew North, Renfrew South and Lanark—W. L. Langlois, Division Engineer.

All road camps operating under the Unemployment Relief Fund were closed in June, after which time the work, considerably curtailed, was carried on by local Settlers' groups until November.

General improvements, and the completion of certain important sections, were carried out on the following main roads:

Pembroke-Barry's Bay; Lake Dore-Golden Lake-Barry's Bay; Barry's Bay-Whitney; Maynooth-Whitney; Maynooth-Madawaska; Calabogie-Lanark; and Calabogie-Burnstown.

A. L. McDougall,
Colonization Road Engineer.

SUMMARY OF EXPENDITURES OF ALL SERVICES UNDER THE ADMINISTRATION OF THE DEPARTMENT OF NORTHERN DEVELOPMENT

For the Twelve Months Period Ended 31st March, 1936

Department of Northern Development		$4,541.879 22
Trans-Canada Highway, Unemployment Relief, Clause 2, 3 and 4. Projects 8 to 18 and 20 to 22	$2,527,490 92	
General Work, Unemployment Relief	6,280,288 70	
		8,807,779 62
Special Warrant: Commission of Enquiry at Matheson		1,984 18
		$13,351,643 02
Colonization Roads Branch		326,192 16
		$13,677,835 18

SUMMARY OF EXPENDITURES FOR THE TWENTY-FOUR YEARS ENDED MARCH 31st, 1936

THE NORTHERN DEVELOPMENT FUND

R. S. O. 1927, Chapter 36, Section 11

Work Undertaken	Summary of Expenditure 23rd May, 1912, to 31st March, 1935	Expenditure for twelve months period ended 31st March, 1936	Total Expenditure to 31st March, 1936
Section 11 (a)—Works and Improvements	$2.100 00	....	$2,100 00
Section 11 (b)—Roads and Bridges	59.760.032 39	$4.447.381 94	64,207.414 33
Section 11 (d)—Farms	206.110 04	....	206.110 04
Section 11 (d)—Assistance of Settlers' Fire Relief	329.099 50	....	329,099 50
Section 11 (d)—Assistance of Settlers' Saw Mills	14.945 90	....	14,945 90
Section 11 (d)—Assistance of Settlers' Feed Shortage	131.799 50	....	131.799 50
Section 11 (d)—Creameries and Grain Elevators	82.681 29	500 00	83.181 29
Section 11 (f)—Seed Grain	416.656 44	6.349 97	423.006 41
Section 11 (f)—Agricultural Implements	46.835 22	....	46.835 22
Section 11 (h)—Purchase of Cattle	120.371 17	3.759 87	124,131 04
Section 11 (j)—Schools and other Public Bldgs.	52.999 29	....	52.999 29
Section 11 (k)—Work not otherwise provided for	4.519 27	....	4,519 27
Returned Soldiers' and Sailors' Settlement Act, 1917	1.185.568 02	....	1,185.568 02
	$62.353.718 03	$4.457.991 78	$66.811,709 81
Settlers' Loan Account	2.097.154 04	83.887 44	2,181,041 48
	$64.450.872 07	$4,541.879 22	$68,992,751 29

THE NORTHERN DEVELOPMENT FUND

R. S. O. 1927, Chapter 36, Section 8

Short Statement

April 16th, 1912	—To amount voted for Expenditure in N. & N.W. Ontario	$5,000,000 00
March 26th, 1918	" " " " "	5,000,000 00
May 21st, 1921	" " " " "	5,000,000 00
May 8th, 1923	" " " " "	5.000,000 00
April 14th, 1925	" " " " "	5,000,000 00
April 8th, 1926	" " " " "	5,000,000 00
April 5th, 1927	" " " " "	5,000,000 00
March 28th, 1929	" " " " "	5,000,000 00
April 3rd, 1930	" " " " "	10,000,000 00
April 2nd, 1931	" " " " "	5,000,000 00
March, 29th, 1932	" " " " "	5,000,000 00
April 18th, 1933	" " " " "	3,000,000 00
April 3rd, 1934	" " " " "	3,000,000 00
		$66,000,000 00
April 12th, 1912, to March 31st, 1935	—By Expenditure for 24 years as per detailed statement	64,450,872 07
	Balance available April 1st, 1935	$1,549,127 93
	Transferred to Northern Development appropriation by Order-In-Council September 18th, 1935	1,549,127 93
	Balance	Nil

DEPARTMENT OF NORTHERN DEVELOPMENT

Expenditure for the Year Ended 31st March. 1936

R. S. O. 1927. Chap. 36

Administration, Vote 138. Items 1, 2, 3 ($124,681.83)

Salaries, Permanent Staff	$88.246 45		
Less: Refund of Salaries, transferred from Medical Fund	3.764 31		
		$84,482 14	
Travelling Expenses, Supplies and Contingencies		40.199 69	
			$124,681 83

Roads and Bridges: Vote 141, Item 1, Vote 138, Item 4. ($4,322,700.11)

District No. 1. Huntsville	$251,321 88
District No. 2. North Bay	465,940 93
District No. 3. Sudbury	293,542 28
District No. 4. Sault Ste. Marie	227.078 10
District No. 5. New Liskeard	565.272 96
District No. 6. Matheson	356,248 93
District No. 7. Cochrane	262,837 49
District No. 8. Fort William	732.267 23
District No. 9. Kenora	359,300 56
District No. 10. Fort Frances	232,896 14
District No. 11. Blind River	334.644 45
District No. 12. Parry Sound	355.071 38
	$4,436.422 33
Less; Repayments transferred from Refund Acct	113.722 22
	$4,322.700 11

District No. 1. Huntsville. ($251,321.88)

Engineer, E. J. Hosking, Huntsville

Bracebridge-Dorset Road	$37,466 34	
Bracebridge-Port Carling Road	34.828 46	
Falkenburg-Rosseau-Parry Sound Road	19,759 07	
Ferguson Highway	31,930 47	
Gravenhurst-Bala Road	31,962 22	
Huntsville-Dorset Road	21,605 80	
Windermere Road	1,697 66	
Equipment and Tools	13,139 43	
Settlers' and Other Roads, Sundry Expenditure	58.932 43	
		$251.321 88

District No. 2. North Bay. ($465,940.93)

Engineer C. Tackaberrey, North Bay

Algonquin Park-Whitney Road	1.734 50	
Ferguson Highway	112.718 84	
Field-Martin River Road	3.938 82	
Mattawa-Callander Road	2,694 25	
North Bay-Callander Road	7.631 99	
North Bay-Sault Road	36,112 61	
North Bay-Temiskaming Road	11.812 03	
Sturgeon Falls-Field Road	4,779 92	
Trans-Canada Highway	63,885 96	
Warren-River Valley Road	6,986 89	
Warren-Rutter Road	20,953 10	
Equipment and Tools	51,945 02	
Settlers' and Other Roads, Sundry Expenditure	140,747 00	
		465,940 93

District No. 3. Sudbury. ($293,542.28)

Engineer A. M. Mills, Sudbury

Chapleau-Iron Bridge Road	1.785 93	
Chelmsford-Blezard Valley-Capreol Road	6.936 22	
Coppercliff-Creighton Road	4.178 48	
Gogama-Three Duck Lake Road	5,997 54	
Kelly Lake Bridge	3.974 39	
Neelon Bridge	1,344 97	
North Bay-Sault Road	72.506 02	
Shining Tree-Tyrrell Road	6.631 94	
Sudbury-Burwash Road	6.884 09	
Sudbury-Capreol-Milnet Road	11,336 12	
Sudbury-Chelmsford-Levack-Cartier Road	24.579 14	
Sudbury-Garson-Massey Bay Road	16,692 63	
Sudbury-Long Lake Road	3.030 13	
Veuve River Bridge	2,950 05	
Equipment and Tools	13.265 22	
Settlers' and Other Roads, Sundry Expenditure	111.449 41	
		293,542 28

District No. 4. Sault Ste. Marie. ($227,078.10)

Engineer R. A. MacAllister, Sault Ste. Marie

North Bay-Sault Road	31.146 97	
Old Goulais Bay Road	3.219 40	
People's Road	2,164 31	
Point Aux Pains Road	9.376 12	
Sault-Batchewana Road	31.531 25	
Sault-Searchmont Road	23.259 42	
Second Line. Korah	42.086 23	
Wawa Station-Michipicoten Road	2.436 42	
Equipment and Tools	21.303 59	
Settlers' and Other Roads. Sundry Expenditure	60.554 39	
		227.078 10

District No. 5. New Liskeard. ($565,272.96)

Engineer D. J. Miller, New Liskeard

Casey-Brethour Road	2.091 12	
Charlton Road	1.739 93	
Elk Lake-Charlton Road	2.616 92	
Elk Lake-Matachewan Road	63.912 45	
Ferguson Highway	290.120 87	
Gowganda Road	3.270 02	
Krugerdorf Road	10.055 27	
La Rose Bridge	18.209 84	
Milberta Road	1.563 89	
New Liskeard-Elk Lake Road	14.882 01	
North Road	2.595 89	
North Temiskaming Road	4.959 35	
Silverado Road	6.160 03	
Wabewawa Bridge	16.757 09	
Equipment and Tools	17.578 14	
Settlers' and Other Roads. Sundry Expenditure	108.760 14	
		565.272 96

District No. 6. Matheson. ($356,248.93)

Engineer A. T. Hamer, Matheson

Back road from South Porcupine to Timmins	5.132 62	
Ferguson Highway	53.459 05	
Frederickhouse Lake Dam	2.142 89	
Goodfish Road	6.501 47	
Kirkland Lake south to Ferguson Highway	2.519 78	
Kirkland Lake-Quebec Bdy. Rd	19.025 38	
Matheson-Shillington-Connaught Road	6.663 38	
Munroe Road	2.288 48	
Porquis Jct-Iroquois Falls Road	3.204 56	
Proquis Jct.-Timmins Road	94,355 42	
Road from Kirkland Lake to Harker Twp	11,925 00	
Shillington-Monteith-Iroquois Falls Road	5.452 63	
Swastika-Matachewan Road	8.811 16	
Equipment and Tools	24,913 59	
Settlers' and Other Roads. Sundry Expenditure	109.853 52	
		356.248 93

District No. 7. Cochrane. ($262,837.49)

Engineer D. A. Maciver, Cochrane

Cochrane-Hearst Road	54,868 95	
Cochrane-Norembega Road	4.417 41	
Ferguson Highway	16,806 20	
Gardiner Road	1,043 05	
Hearst-Coppell Road	3,565 24	
Equipment and Tools	24,977 09	
Settlers' and Other Roads, Sundry Expenditure	157,159 55	
		262,837 49

District No. 8. Fort William. ($732,267.23)

Engineer E. Smith, Fort William

Bankfield Creek Bridge	2.716 09	
Dawson Road	54,728 64	
Devon Road	1,799 89	
Dog Lake Road	4,250 40	
Dona-Finmark Road	3,301 41	
Geraldton-Little Long Lac Road	214,843 15	
Gunflint Highway	5,391 13	
Hymers-Scoble Road	3,254 59	
International Highway	107,511 99	
Jacques Road	1,647 21	
Kakabeka-Hymers Road	4,656 08	
Marks Road	4,225 83	
Oliver Road	12,878 33	
Onion Lake Road	6,342 18	
Pass Lake Road	1,992 85	
Pearson Road	2,229 40	
Road from International Highway to Oliver Road	23.779 65	
Savant Lake Road	1,994 62	
Scoble Road	6,240 51	
Sibley West Road	2.293 75	
Silver Mountain Road	3.645 32	
Trans-Canada Highway	27,347 01	
Equipment and Tools	40.310 46	
Settlers' and Other Roads, Sundry Expenditure	194.886 74	
		732.267 23

District No. 9. Kenora. ($359,300.56)

Engineer E. A. Kelly, Kenora

East Melick Road	6.649 39	
Eton-Rugby Road	2,382 14	
General Surveys. Kenora, Dryden. Sioux Lookout	15.764 47	
Kenora-Fort Frances Highway	2.347 45	
Kenora-Redditt Road	17.235 49	
Lac Lu Loop Road	3,779 16	
Nelson Bridge	1,981 13	
Pellatt Road	10,911 58	
Root River Transportation Route between Lac Seul and Lake St. Joseph	45.192 31	
Sioux Lookout-Dinorwic Road	7,550 40	
Trans-Canada Highway	42.811 75	
Wabigoon River Bridge	5,694 72	
Equipment and Tools	32.243 55	
Settlers' and Other Roads. Sundry Expenditure	164.757 02	
		359.300 56

District No. 10. Fort Frances. ($232.896.14)

Engineer G. H. Lowry. Fort Frances

Arbor Vitae Road	13.035 05
Barnhart Road	3.022 99
Barwick Road	9.797 02
Crozier Road	1,524 29
Deerlock Road	1.874 50
Devlin Road	2.741 74
Fort Frances-Rainy River Road	53.822 01
Kenora-Fort Frances Highway	9,483 92

La Vallee Road	7,227 85	
River Road	3,316 07	
Sleeman-Morson Road	7,408 45	
Spohn Road	5,851 06	
Stratton-Dewart Road	5,271 64	
Tracey Rapids Bridge	2,796 62	
Tovell Road	3.215 44	
Equipment and Tools	19.086 53	
Settlers' and Other Roads, Sundry Expenditure	83,420 96	
		232,896 14

District No. 11. Blind River. ($334,644.45)

Engineer R. G. Sneath, Blind River

Beaver Lake Road	1,969 49	
Dunn's Valley Road	3,448 99	
Espanola-Little Current Road	20,895 36	
Green Bay-Bidwell Road	1,775 66	
Gore Bay-Meldrum Bay Road	3.533 03	
Gore Bay-Providence Bay Road	2.984 11	
Little Current-Gore Bay Road	8.327 14	
Little Current-Manitowaning Road	3,144 09	
North Bay-Sault Road	94,708 65	
Providence Bay-Manitowaning Road	3,361 81	
Sable River Road	1,946 25	
Sandfield-Mindemoya Road	2.276 09	
St. Joseph Island Roads	20.145 98	
Sylvan Valley Road	1.211 23	
Wharncliffe Road	4,437 84	
White River Road	9,543 83	
Equipment and Tools	29.050 08	
Settlers' and Other Roads, Sundry Expenditure	121.884 82	
		334.644 45

District No. 12. Parry Sound. ($355,071.38)

Engineer R. E. Richardson, Parry Sound

Burks Falls-Parry Sound Road	48,751 83	
Emsdale-Kearney Road	2.567 43	
Emsdale-Sprucedale Road	3,697 39	
Falkenburg-Rosseau-Parry Sound Road	30,403 34	
Ferguson Highway	122,918 15	
Gravenhurst-Bala-Parry Sound Road	4,998 71	
Parry Sound-Pointe Au Baril-Sudbury Road	27,609 48	
Powassan-Restoule Road	9,011 71	
Sundridge-Magnetewan Road	11,484 72	
Trout Creek-Loring Road	25,085 59	
Equipment and Tools	16.683 09	
Settlers' and Other Roads, Sundry Expenditure	51.859 94	
		355,071 38
		$4,436,422 33
Less: Repayments transferred from Refund Account		113,722 22
		$4,322,700 11

STATUTORY

UNEMPLOYMENT RELIEF. TRANS-CANADA HIGHWAY ($2.527,490.92)

Clauses 2, 3, 4, Projects 8-22, agreement dated July 4th, 1935

Ottawa Valley Section:	
Project No. 17.	
From Pembroke through Mattawa to North Bay	$203.375 73
Thunder Bay Section:	
Projects 8, 9, 10, 22.	
From Rossport to Schreiber to Nipigon through Port Arthur and Fort William to English River	1,537,807 14

Western Section:	
Projects 11. 12, 13, 14, 15, 16.	
From English River through Dyment, Dinorwic, Dryden, Kenora to Manitoba Boundary	2.076,080 29
Schreiber to White River Section:	
Project 18.	
From Schreiber easterly to White River	2.837,180 21
North Bay to Sault Ste. Marie Section:	
Project 20.	
From North Bay to Sault Ste. Marie	7.207 24
Sault Ste. Marie to White River Section:	
Project No. 21.	
From Sault Ste. Marie to White River	16.437 56
General Expenses	132,191 47
	$6.810.279 64
Less Repayments	8,041 86
	$6,802.237 78
Less Proportionate Refunds by Dominion Government	4.274.746 86
	$2,527.490 92

STATUTORY

GENERAL WORK — UNEMPLOYMENT RELIEF ($6.280.288.70)

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Districts ($5,355,339.39)

District No. 1. Huntsville	$269.051 08	
District No. 2. North Bay	1.357.481 23	
District No. 3. Sudbury	190.391 11	
District No. 4. Sault Ste. Marie	151.607 67	
District No. 5. New Liskeard	107.279 39	
District No. 6. Matheson	182.104 49	
District No. 7. Cochrane	79.113 62	
District No. 8. Fort William	145.324 19	
District No. 9. Kenora	2.168.657 92	
District No. 10. Fort Frances	51.658 61	
District No. 11. Blind River	176.663 09	
District No. 12. Parry Sound	348.408 45	
Location Survey Office	20.095 01	
General Expense Account	107.503 53	
	$5.355.339 39	

District No. 1. Huntsville. ($269,051.08)

Engineer E. J. Hosking. Huntsville

Bala-Parry Sound Survey	$2.688 42	
Bracebridge-Baysville-Dorset Road	4.219 42	
Bracebridge-Port Carling Road	4,611 21	
Gravenhurst-Bala-Parry Sound Road	159.951 02	
Huntsville-Baysville Road	75.301 18	
Other Roads. Sundry Expenditure	22.279 83	
		$269.051 08

District No. 2. North Bay ($1.357.481.23)

Engineer C. Tackaberry, North Bay

Algonquin Park-Whitney Road	697.453 85
Bigwood-French River Road	1.574 45
Chudleigh-Afton Mine Road	8.956 71
Ferguson Highway	41.058 16
Field-Marten River Road	5.547 81
Hagar-St. Charles Road	1.452 13
Mattawa-Temiskaming Road	18.031 65

North Bay-Sault Road	25,099 13	
North Bay-Temiskaming Road	443,771 75	
Sturgeon Falls — Field Road	22,471 97	
Verner-Field Road	1,105 65	
Warren-Rutter Road	19,804 20	
Other Roads, Sundry Expenditure	71,153 77	
		1,357,481 23

District No. 3. Sudbury. ($190,391.11)

Engineer A. M. Mills, Sudbury

Chapleau-Iron Bridge South Road	27,264 96	
Folyet Road	2,435 74	
Gogama-Three Duck Lake Road	8,615 04	
North Bay-Sault Road	69,756 23	
Sudbury-Britt Survey	5,963 99	
Sudbury-Burwash Road	9,665 07	
Sudbury-Chelmsford-Cartier Road	14,499 11	
Sudbury-Milnet Road	8,414 66	
Sudbury-Timmins Survey	18,424 09	
Other Roads, Sundry Expenditure	25,352 22	
		190,391 11

District No. 4. Sault Ste. Marie. ($151,607.67)

Engineer R. A. McAllister, Sault Ste. Marie

Franz to Hale Survey	2,318 21	
North Bay-Sault Road	5,391 34	
Sault-Batchewana Road	93,000 48	
Sault-White River Survey	32,604 77	
Wa Wa Gold Mines Road	1,724 67	
Wa Wa City-Minto Grace Mine Rd	1,538 86	
White River-Hornepayne Road (Survey)	4,855 40	
Other Roads, Sundry Expenditure	10,173 94	
		151,607 67

District No. 5. New Liskeard. ($107,279.39)

Engineer D. J. Miller, New Liskeard

Casey-Brethour Road	1,682 35	
Chudleigh-Afton Mine Road	2,298 51	
Elk Lake-Charlton Road	1,992 22	
Ferguson Highway	39,499 08	
Lorrain Road	2,154 35	
New Liskeard-Elk Lake Road	6,289 83	
Other Roads, Sundry Expenditure	53,363 05	
		107,279 39

District No. 6. Matheson. ($182,104.49)

Engineer A T. Hamer, Matheson

Back Road from South Porcupine to Timmins	12,421 11	
Coulson Mine Road	1,383 30	
Ferguson Highway	13,120 88	
Goodfish Road	18,513 58	
Porquis Junction-Timmins Road	48,387 63	
Swastika-Matachewan Road	40,645 24	
Other Roads, Sundry Expenditure	47,632 75	
		182,104 49

District No. 7. Cochrane. ($79,113.62)

Engineer D. A. Maciver, Cochrane

Cochrane-Hearst Road	3,137 43	
Cochrane-Quebec Boundary Survey	7,687 55	
Hearst-Coppell Road	5,210 47	
Other Roads, Sundry Expenditure	63,078 17	
		79,113 62

District No. 8. Fort William. ($145,324.19)

Engineer E. Smith, Fort William

Dawson Road	37,465 11	
Dog Hole Lake to Pickle Crow Mine Survey	12,581 67	

Gunflint Highway	30,767 21	
Nipigon to Geraldton Survey	20,288 39	
Schreiber to White River Survey	36,091 76	
Twin Lake Road	1,215 30	
Other Roads, Sundry Expenditure	6,914 75	
		145,324 19

District No. 9. Kenora. ($2,168,657.92)

Engineer E. A. Kelly, Kenora

Extension to King Street, Sioux Lookout	5,418 67	
Hudson-Sioux Lookout Road	68,948 72	
Kenora-Fort Frances Highway	1,866,241 15	
Kenora-Malachi Survey	11,258 69	
Kenora-Red Lake Survey	36,598 83	
Kenora-Redditt Road	16,274 78	
Minaki Road	1,614 45	
Pellatt Road	9,587 88	
Quibell-Red Lake Survey	7,993 05	
Sioux Lookout-Dinorwic Road	111,535 06	
Other Roads, Sundry Expenditure	33,186 64	
		2,168,657 92

District No. 10. Fort Frances. ($51,658.61)

Engineer G. H. Lowry, Fort Frances

Kenora-Fort Frances Highway	36,731 79	
Off Lake-Clearwater Road	10,865 96	
Other Roads, Sundry Expenditure	4,060 86	
		51.658 61

District No. 11. Blind River. ($176,663.09)

Engineer R. G. Sneath, Blind River

Dunn Valley Road	1,028 68	
Espanola-Little Current Road	6,587 42	
Iron Bridge-Chapleau Road	1,517 07	
Little Current-Gore Bay Road	6,352 50	
North Bay-Sault Road	130,342 78	
Providence Bay-Manitowaning Road	2,124 32	
Wharncliffe Road	13,092 07	
Other Roads, Sundry Expenditure	15.618 25	
		176,663 09

District No. 12. Parry Sound. ($348,408.45)

Engineer R. E. Richardson, Parry Sound

Bala to Parry Sound Survey	3,289 30	
Burks Falls to Parry Sound Road	6,842 16	
Falkenburg-Rosseau-Parry Sound Road	51,585 22	
Gravenhurst-Bala-Parry Sound Road	4,509 63	
Parry Sound-Pointe au Baril-Sudbury Road	235,062 31	
Powassan-Restoule Road	1,833 80	
Sudbury-Britt Survey	2,417 16	
Trout Creek-Loring Road	2,406 09	
Other Roads, Sundry Expenditure	40.462 78	
		348,408 45
Location Survey Office		20,095 01
General Expense Account		107,503 53
Totals		$5.355.339 39

COLONIZATION ROADS AREA ($924,949.31)

Kinmount Division	$386,219 53
Barry's Bay Division	181,742 29
Madoc Division	301,547 49
Turkey Point	21,269 79
Long Point-Port Rowan Road	16,605 31
Rondeau Provincial Park	17,564 90
	$924,949 31

Kinmount Division ($386,219.53)

Division Engineer T. C. Swartman, Kinmount

Bancroft-Wilberforce-Minden-Haliburton Road	$31,330 53	
Bobcaygeon-Minden-Kinmount Road	39,436 51	
Buckhorn-Eagle Lake and Extension	35,272 00	
Burleigh Falls-Apsley-Bancroft Road	47,566 62	
Burleigh Falls-Buckhorn-Bobcaygeon Road	31,866 32	
Clydesdale-Chandos-Apsley Road	6,432 57	
Coboconk-Kirkfield Road	25,344 91	
Eagle Lake-Redstone Lake Road	6,142 92	
Eagle Lake-West Guildford-Carnarvon Road	1,542 87	
Harcourt-Keneway Road	3,284 90	
Haliburton-Lochlin-Gelert-Minden Road	4,094 15	
Kinmount-Gooderham-South Boundary Road	30,518 58	
Monck Road	23,623 86	
Rosedale-Coboconk-Minden-Dorset Road	49,195 49	
Victoria Road	6,338 10	
Other Roads, Sundry Expenditure	44,229 20	
		$386,219 53

Barry's Bay Division. ($181,742.29)

Division Engineer W. L. Langlois, Barry's Bay

Calabogie-Burnstown Road	1,538 52	
Calabogie-Lanark Boundary	19,394 83	
Combermere-Barry's Bay-Pembroke Road	36,960 97	
Golden Lake-Eganville-Denbigh-Kaladar Road	28,906 99	
Lake Dore-Whitney Road	1,255 16	
5th Line Valley-Micksburg Road	4,795 14	
Madawaska-Maynooth Road	3,327 94	
Whitney-Barry's Bay-Golden Lake Road	36,557 18	
Whitney-Maynooth Road	2,393 15	
Other Roads, Sundry Expenditure	46,612 41	
		181,742 29

Madoc Division. ($301,547.49)

Division Engineer C. F. Szammers, Madoc

Addington Road	87,917 20	
Bancroft-Apsley Road	9,023 94	
Belleville-Bancroft Road	126,156 98	
Fernleigh-Myers Cave-Arden Road	5,811 16	
Levant Station-Sharbot Lake Road	36,602 20	
Maynooth-Combermere Road (Peterson Road)	13,534 05	
Other Roads, Sundry Expenditure	22,501 96	
		301,547 49
Turkey Point		21,269 79
Long Point-Port Rowan Road		16,605 31
Rondeau Provincial Park		17,564 90
Total		$924,949 31

COLONIZATION ROADS BRANCH

Salaries and Contingencies—		
Salaries	$7.727 34	
Contingencies	1.113 25	
		$8,840 59
By-Laws		142,099 58
Construction and Maintenance		154,282 79
Inspections		20,685 43
Storage and Insurance		128 51
Engineering and Surveying		155 26
Total		$326,192 16

DEPARTMENT OF NORTHERN DEVELOPMENT

Statement of Revenue for Twelve Months Period Ended March 31st, 1936

	Capital	Ordinary	Total
Section 11 (b)—Roads.			
Sale of Equipment, Materials, Supplies, Rentals, Refunds, etc.	$92.210 33	$21.511 89	$113.722 22
Note: Transferred as Expenditure Refund on Roads and Bridges Expenditure.			
Section 11 (f)—Seed Grain.			
Repayment of Principal	6.644 50	....	....
Interest	....	1.235 10	7.879 60
Section 11 (f)—Agricultural Implements.			
Repayment of Principal	105 95	....	....
Interest	....	67 03	172 96
Section 11 (h)—Cattle Purchase.			
Repayment of Principal	3.029 36	....	....
Interest	....	437 48	3.466 84
Section 11 (d)—Assistance to Settlers; Feed Shortage.			
Repayment of Principal	119 69	....	....
Interest	....	17 03	136 72
Settlers' Loan Account.			
Repayment of Principal	76.667 44	....	....
Interest	....	16.461 77	93.129 21
	$178.777 25	$39.730 30	$218.507 55
Unemployment Relief:			
Proportionate Repayments by Federal Government:			
On Account prior to April 1, 1935	$2.809,659 92		....
On Account Current Fiscal Year	1.537,359 37		$4,347,019 29
Sundry Refunds: Transportation and Medical Fund, Wages	8.041 86		8,041 86
	$4,355.061 15		$4,355,061 15

DEPARTMENT OF NORTHERN DEVELOPMENT

Assets—31st of March, 1936

	Principal	Accrued Interest	Totals
Notes Outstanding.			
Section 11 (d)—Feed Shortage	$57.564 49	$39,026 83	$96.591 32
Section 11 (f)—Seed Grain	103.670 19	58,496 59	162.166 78
Section 11 (f)—Agricultural Implements	16.261 77	10.798 27	27,060 04
Section 11 (h)—Cattle Purchase	16.185 06	2.551 44	18,736 50
	$193.681 51	$110,873 13	$304,554 64
Settlers' Loan Account.			
Loans Outstanding	740.182 46	139.638 40	879,820 86
	$933,863 97	$250.511 53	$1.184.375 50

H. J. Armstrong,
Accountant.

REPORT OF SETTLERS' LOAN COMMISSIONER

Honourable T. B. McQuesten, K.C., B.A., LL.B.,
Minister of Public Works and Highways, Ontario.
Minister charged with the administration of the
Department of Northern Development, Ontario.

Honourable Sir,

Attached hereto is a Financial Statement bringing the Accounts up to the end of the Fiscal Year, ending March 31st, 1936.

I wish to point out to you that the collections have not been up to the previous standard, due to the prevailing conditions throughout the North, with which you are no doubt familiar.

There have been numerous applications received, but due to the fact that funds available for loans have been limited, it necessitated the refusal of same.

Yours truly,

J. O. Fraser,
Commissioner.

STATEMENT OF LOANS ISSUED

To March 31st, 1936

Total Number of Applications received:			
To March 31st, 1935		10,275	
To March 31st, 1936		267	
			10,542
Loans			
Loans Issued:			
To March 31st, 1935		5,745	
To March 31st, 1936		82	
			5,827
Amount granted			$1,932,487 10
Average Loan per Settler			331 64
Amount applied for			4,095,791 00
Number of Loans issued	5,827		
Number of Loans outstanding	3,099		
Number of Loans paid in full	2,728		

STATEMENT OF LOANS TO CREAMERIES AND OTHER LIKE ASSOCIATIONS

Included in the Above Statement to March 31st, 1936

Applications and Loans

	Amount Granted	Amount Owing
The Sudbury Dairy Ltd.	$24.000 00	Nil
The Kenora Dairy Co-Operative Association Ltd.	13.000 00	Nil
Producers Co-Operative Creamery Co. Ltd.. La Vallee. Ont.	3,500 00	$1,000 00
The Matheson Co-Operative Dairy Co. Ltd.	7.530 00	Nil
The Cochrane Co-Operative Dairy Co. Ltd.	7.830 00	Nil
Northern Co-Operative Co. Ltd.. Rydal Bank. Ont.	5.000 00	3.000 00
The Thunder Bay Co-Operative Dairy Ltd.	18,600 00	10,030 00
Fort Frances Creamery Co. Ltd., Fort Frances. Ont.	5,000 00	4,250 00
Totals	$84.460 00	$18,280 00

PAYMENTS ON ACCOUNT OF INTEREST

	Accrued Interest Due	Interest Received	Per Cent
Loans to Settlers	$594.327 66	$455.703 96	....
Loans to Creameries	22.813 96	21.799 26	....
Total	$617,141 62	$477,503 22	77.4

On Account of Principal

	Payments on Principal Due	Principal Received	Per Cent
Loans to Settlers	$1.455.536 90	$1.126.104 64	....
Loans to Creameries	65,143 33	66,200 00	....
Total	$1.520.680 23	$1.192.304 64	78.4

Total

	Payments Due	Payments Received	Per Cent
Loans to Settlers	$2.049.864 56	$1.581.808 60	....
Loans to Creameries	87.957 29	87.999 26	....
Total	$2,137.821 85	$1.669.807 86	78.1

Charges	$617.141 62	$1,932.487 10
Payments	477.503 22	1.192,304 64
Outstanding	$139,638 40	$740,182 46
Settlers	$138,623 70	$721,902 46
Creameries	1.014 70	18.280 00

STATEMENT OF LOANS ISSUED AND OUTSTANDING

District	Issued		Outstanding		
	No. of Loans	Issued	No. of Loans	Unpaid Principal	Unpaid Interest
Algoma	464	$155,330 00	357	$101,430 27	$14,620 55
Manitoulin	15	6,000 00	3	450 00	59 15
Nipissing	345	117,960 00	211	53,257 38	9,858 02
Sudbury	480	196,780 00	316	87.212 14	11,483 30
Kenora	513	172,390 00	230	44,017 48	8,661 47
Rainy River	439	146,450 00	238	57,404 96	9,181 51
Temiskaming	2,389	743,802 10	1,112	245,719 86	52,070 32
Thunder Bay	1,181	393,625 00	631	150,570 37	33,704 08
Parry Sound	1	150 00	1	120 00	
Totals	5,827	$1,932,487 10	3.099	$740.182 46	$139,638 40

To March 31st, 1935	$1.907,515 00
To March 31st, 1936	24,972 10

STATEMENT OF RECEIPTS

March 31st. 1935. to March 31st, 1936

Receipts — Ordinary

Date	Interest on Loans	Principal	Misc. Revenue	Exchange
April, 1935	$1.271 49	$3,237 27		
May, 1935	1,056 05	33,253 10		
June, 1935	1,479 96	2,847 07		
July, 1935	982 90	3,161 10		
August, 1935	1,707 62	1,910 45	$15 00	
September, 1935	782 61	1,254 75		
October, 1935	1,082 50	1,301 51		
November, 1935	1,115 08	2,007 29		
December, 1935	1,193 71	6,439 95		15
January 1936	1,811 72	1,917 85		17
February, 1936	1,693 34	15,662 26		
March. 1936	2,269 24	3,674 84		23
Totals	$16.446 22	$76,667 44	$15 00	$0 55

SETTLERS' LOAN COMMISSIONER

STATEMENT OF RECEIPTS — YEAR ENDING MARCH 31st, 1936

To payment from Treasury, re allowance for Bad Debts	$50.000 00
To payments on Principal	26,667 44
To payments (Interest)	16,446 22
Miscellaneous Revenue	15 00
To Exchange	55
	$93,129 21

SUMMARY OF RECEIPTS

To March 31st, 1936

	Payments on Principal	Interest Payments	Refund cost of Certificate of Search	Over-payments Refund	Exchange	Mis-cellaneous
1935..	$1,115,637 20 76,667 44	$461.057 00 16,446 22	$279 54	$93 07	$48 14 55	$848 80 15 00
	$1.192.304 64	$477,503 22	$279 54	$93 07	$48 69	$861 80

SETTLERS' LOAN COMMISSIONER

Statement of Expenditure—Year Ending March 31st, 1936

Salaries		
C. H. Fullerton, Commissioner, 9 mos.	$3,273 75	
A. E. MacLean, Head Clerk, Group 2	2,449 99	
F. M. Jack, Clerk Stenog., Group 1	1,180 65	
M. L. Harper, Sr. Clerk Stenographer, 6 mos.	733 80	
M. L. Potts, Clerk Stenog., Group 2, 6 mos.	367 50	
Treasurer of Ontario, Assessment	194 31	
		$8.200 00
Office Expense		
Repairs	$3 13	
Telegrams	3 58	
Stationery and Printing	354 23	
Cost of Search	13 31	
Legal Adjusting	7 00	
		381 25
Outside Expense		
Alexander, J. A.	$104 14	
Bastien, J. A.	28 50	
Gingras, A.	80 84	
Greenwood, W. B.	4 69	
Hough, Wm.	17 84	
Lowe, J. S.	13 70	
Marchildon, J. P.	9 95	
McDougall, J. M.	9 50	
MacDonald, S. C.	44 66	
MacDonald, F. C.	5 00	
McKinnon, C.	4 00	
Smith, L. G.	32 86	
Torrie, L.	55 94	
Trainor, W. J.	5 00	
Tremblay, Thos.	27 03	
Van Horn, L. E.	36 92	
Widdifield, F. W.	43 91	
Wilson, S. H.	3 92	
		528 40
		$9,109 65

SUMMARY OF EXPENSES TO MARCH 31st, 1936

	To March 31, 1935	Year ending March 31st, 1936	Total
Salaries	$162.566 44	$8.200 00	$170,766 44
Travelling Expenses	1.259 85		1,259 85
Office Expenses	16.131 63	381 25	16,512 88
Outside Expenses	9.681 12	528 40	10.210 52
Bad Debts		50.000 00	50,000 00
	$189.639 04	$59,109 65	$248,749 69

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APPENDIX A

DEPARTMENT OF NORTHERN DEVELOPMENT-REPORT, Apr. 1, 1935-Mar. 31, 1936

DIRECT EXPENDITURE

Electoral District	Cutting and Burning New Road Miles	Side Brush Existing Road Miles	Stump and Grub Miles	Grading		Ditching Cu. Yds.	Gravelling				Clay Surfacing		Crushed Rock			Dragging Miles	Culverts				Bridges											Excavation	
				New Miles	Repair Miles		New		Repairs		Length Miles	Cu. Yds.	Crushed Cu. Yds.	Hauled Cu. Yds.	Road Covered Miles		Wood	Stone	Concrete	Metal	New			Replaced			Repaired			Painted		Earth Cubic Yards	Rock Cubic Yards
							Length Miles	Cu. Yds.	Length Miles	Cu. Yds.											Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel		
ALGOMA	....	140.50	3.20	28.00	347.75	6,762	65.90	9,724	240.45	28,335	43.60	7,834	....	45	....	26,481	70	.....	1	8	2	....	....	1	....	....	44	3	....	....	....	12,127	2,292
COCHRANE NORTH	0.93	12.00	1.79	1.00	1.51	15,849	16.65	11,410	56.70	14,912	....	....	12,441	7,474	6.02	55,052	53	.....	.....	99	9	....	....	5	....	....	46	....	....	....	....	30,591	5
COCHRANE SOUTH	30.93	13.94	11.58	4.40	151.88	13,715	....	26,084	....	46,652	....	6,814	....	2,326	....	47,685	78	.....	.....	46	20	....	....	....	....	....	10	....	....	....	....	31,237	21,061
FORT WILLIAM	23.94	146.91	21.40	12.05	183.97	27,123	20.42	10,778	155.35	32,873	3.11	6,236	....	2,410	....	18,899	216	1	11	80	2	....	....	7	....	....	28	....	10	10	....	54,336	4,443
KENORA	18.08	135.59	7.77	34.23	165.20	14,470	9.70	8,521	55.96	29,328	5.41	2,191	....	....	....	5,077	120	.....	.....	12	12	....	....	....	....	....	14	....	....	....	....	29,832	8,029
MANITOULIN	....	176.80	5.65	1.00	166.75	4,325	9.35	1,438	148.68	23,957	44.70	5,601	....	23	....	23,464	23	7	1	18	....	....	....	5	....	....	23	....	....	....	....	3,902	1,265
MUSKOKA	2.67	56.47	3.05	14.58	27.27	6,829	55.10	24,592	228.81	40,020	48.64	12,245	....	....	....	4,511	51	12	2	14	....	....	....	....	....	....	....	....	....	....	....	38,113	3,850
NIPISSING	3.90	79.35	0.93	2.11	92.86	7,877	6.19	3,617	50.60	20,560	6.76	4,512	....	20	....	5,583	59	6	.....	5	1	1	....	11	....	....	15	....	....	5	....	15,078	4,108
PARRY SOUND	0.48	106.44	0.83	10.00	4.26	12,240	26.34	8,651	256.07	76,318	24.48	5,036	....	....	....	24,510	76	.....	2	26	8	1	....	13	....	....	9	....	1	....	....	20,025	8,933
PORT ARTHUR	12.08	142.15	4.21	2.95	108.15	13,241	1.40	1,971	161.00	22,814	....	....	....	....	....	13,048	91	2	3	32	1	....	....	1	....	....	26	....	....	7	....	46,025	3,263
RAINY RIVER	4.15	342.22	5.62	6.35	4.44	29,302	4.69	7,304	328.35	28,090	23.04	4,750	....	....	....	40,221	45	1	.....	39	1	....	....	6	....	....	70	1	....	....	....	13,725	706
RENFREW NORTH	....	0.25	....	2.50	....	236	2.00	408	2.25	404	....	....	....	....	....	800	.....	.....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	60	....
SAULT STE. MARIE	0.75	64.22	2.38	1.52	43.05	9,803	20.45	5,588	91.33	20,673	44.40	4,894	....	1,652	11.25	23,228	15	1	9	17	....	....	....	....	....	....	12	....	....	....	....	31,974	359
STURGEON FALLS	6.18	122.45	0.97	2.61	102.04	130	7.35	5,813	110.09	35,205	12.63	10,253	....	1,609	7.70	46,672	142	6	.....	17	5	....	....	18	....	....	55	1	....	8	1	24,114	10,596
SUDBURY	9.84	102.20	10.13	60.35	743.48	29,242	13.71	9,547	289.90	30,557	76.12	21,336	255	4,845	22.25	25,770	149	2	2	29	....	....	....	....	....	....	....	....	....	....	....	13,709	2,069
TEMISKAMING	4.13	71.79	20.87	1.53	20.75	20,262	82.75	36,929	180.95	25,691	12.71	4,271	3,471	24,369	21.74	73,756	33	1	.....	33	2	....	....	4	....	....	30	....	....	....	....	38,702	7,630
TOTALS	118.06	1713.28	100.38	185.18	2163.36	211,406	342.00	172,375	2356.49	476,389	345.60	95,973	16,167	44,773	68.96	434,817	1221	39	31	475	63	2	....	71	....	....	382	5	11	30	1	403,550	78,609

El		Bridges											Excavation	
		New			Replaced			Repaired			Painted			
	Meta	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Earth Cubic Yards	Rock Cubic Yards
Alg	1	....	....	1	3	....	....	18	....	3	....	....	269	711
Coc	..	....	....	....	....	....	....	....	....	....	....	....	108	....
Coc	..	....	....	....	....	....	....	....	....	....	....	....	....	....
For	..	....	....	....	....	....	....	....	....	....	....	....	....	....
Ke	5	1	....	....	1	....	....	4	....	....	....	....	17,573	262
Ma	1	....	....	....	1	....	....	4	....	....	....	....	411	365
Nip	..	....	....	....	....	....	....	....	....	....	....	....	....	....
Por	..	3	....	....	2	....	....	9	....	....	....	....	4,036	892
Ra	2	1	....	....	....	....	....	9	....	....	....	....	1,572	19
Sau	11	....	....	....	....	....	....	....	....	....	....	....	245	20
Stu	4	1	....	....	....	....	....	10	....	....	....	....	839	161
Sud	2	....	....	....	....	....	....	....	....	....	....	....	100	....
Te	12	....	....	....	1	....	....	11	....	....	....	....	4,522	75
	38	6	....	1	8	....	....	65	....	3	....	....	29,675	2,505

APPENDIX B 1

DEPARTMENT OF NORTHERN DEVELOPMENT-REPORT, Apr. 1, 1935-Mar. 31, 1936

NORTHERN DEVELOPMENT AGREEMENTS

Electoral District	Cutting and Burning New Road Miles	Side Brush Existing Road Miles	Stump and Grub Miles	Grading		Ditching Cu. Yds.	Gravelling				Clay Surfacing		Crushed Rock			Drag-ging, Miles	Culverts				Bridges												Excavation	
							New		Repairs												New			Replaced			Repaired			Painted			
				New Miles	Repair Miles		Length Miles	Cubic Yards	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Crushed Cubic Yards	Hauled Cubic Yards	Road Covered Miles		Wood	Stone	Concrete	Metal	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Earth Cubic Yards	Rock Cubic Yards
ALGOMA	....	25.84	1.00	3.36	78.69	2,109	3.30	831	120.96	10,095	1.70	350	....	....	....	93	72	.....	8	1	....	....	1	3	....	....	18	....	3	....	....	269	711
COCHRANE NORTH	0.16	....	0.09	....	....	1,708	0.92	502	0.62	481	....	....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	108	....
COCHRANE SOUTH	....	....	....	....	60.00	415	....	....	....	....	....	....	....	35	....	....	13	.....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....
FORT WILLIAM	35.31	22.94	11.23	9.39	59.41	10,148	9.54	6,946	26.33	16,031	0.12	46	....	....	....	1,349	119	.....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....
KENORA	1.86	11.80	2.50	3.25	50.85	4,135	0.70	475	24.55	3,328	....	828	....	15	....	30	51	3	.....	5	1	....	....	1	....	....	4	....	....	....	....	17,573	262
MANITOULIN	1.65	80.55	1.25	4.32	15.25	1,520	6.10	1,723	140.88	10,614	5.20	453	....	100	0.33	1,275	31	28	1	1	....	....	....	1	....	....	4	....	....	....	....	411	365
NIPISSING	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....
PORT ARTHUR	5.00	123.13	3.66	0.17	....	3,582	....	....	....	4,939	....	18	....	....	....	2,102	52	.....	.....	.....	3	....	....	2	....	....	9	....	....	....	....	4,036	892
RAINY RIVER	1.43	100.08	4.53	4.67	19.54	20,069	4.82	3,156	123.51	17,103	0.45	296	....	....	....	4,866	73	.....	16	2	1	....	....	....	....	....	9	....	....	....	....	1,572	19
SAULT STE. MARIE	....	7.00	....	0.75	160.00	....	....	2,942	....	....	....	....	....	....	....	....	1	.....	10	11	....	....	....	....	....	....	....	....	....	....	....	245	20
STURGEON FALLS	....	32.95	0.75	0.60	33.98	4,607	0.56	....	31.46	....	0.31	....	....	....	....	2,636	125	3	.....	4	1	....	....	....	....	....	10	....	....	....	....	839	161
SUDBURY	....	2.35	0.85	18.50	0.10	604	1.00	220	7.00	1,084	4.00	317	....	....	....	103	47	.....	2	2	....	....	....	....	....	....	....	....	....	....	....	100	....
TEMISKAMING	1.60	16.43	2.00	25.88	286.55	12,985	13.75	2,324	174.95	17,744	1.55	1,208	....	....	....	1,101	26	.....	.....	12	....	....	....	1	....	....	11	....	....	....	....	4,522	75
TOTALS	47.01	423.07	27.86	70.89	764.37	61,882	40.69	19,119	650.26	81,419	13.33	3,516	....	150	0.33	13,555	610	34	37	38	6	....	1	8	....	....	65	....	3	....	....	29,675	2,505

Bridges										Excavation	
New		Replaced			Repaired			Painted		Earth Cubic Yards	Rock Cubic Yards
Steel	Concrete	Wood	Steel	Concrete	Wood	Steel	Concrete	Wood	Steel		
....	....	3	....	....	3	....	....	....	....	436	3 ,401
....	....	....	....	....	10	....	....	....	....	30,561	8,143
....	....	3	....	....	....	....	....	....	....	15	100
....	....	2	....	....	4	....	....	....	....	733	745
....	....	1	....	....	9	....	....	....	....	14,396	3,875
....	....	....	....	....	23	....	....	....	....	9,003	1,607
....	....	....	....	....	....	....	....	....	....	....	5
....	....	....	....	....	....	....	....	....	....	4,550	....
....	....	....	....	....	....	....	....	....	....	968	....
....	....	9	....	....	49	....	....	....	....	60,682	17,876

APPENDIX B 2

DEPARTMENT OF NORTHERN DEVELOPMENT

REPORT APRIL 1st, 1935-MARCH 31st, 1936

COLONIZATION ROAD BYLAWS

Electoral District	Cutting and Burning New Road Miles	Side Brush Existing Road Miles	Stump and Grub Miles	Grading		Ditching	Gravelling				Clay Surfacing		Crushed Rock			Dragging	Culverts				Bridges											Excavation	
							New		Repairs												New			Replaced			Repaired			Painted			
				New Miles	Repair Miles	Cubic Yards	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Crush Cubic Yards	Haul Cubic Yards	Road Covered Miles	Miles	Wood	Stone	Concrete	Metal	Wood	Steel	Concrete	Wood	Steel	Concrete	Wood	Steel	Concrete	Wood	Steel	Earth Cubic Yards	Rock Cubic Yards
ADDINGTON........	....	15.10	0.08	....	634.05	876	....	....	147.87	....	8.85	....	....	....	0.10	47	84	9	12	2	....	....	....	3	....	....	3	....	....	....	....	436	3 ,401
HALIBURTON-VICTORIA....	1.17	20.36	2.08	4.79	138.31	8876	35.76	570	572.10	2,032	16.88	2,412	34,238	25 ,695	51.79	5,406	132	56	3	30	....	....	....	....	....	....	10	....	....	....	....	30,561	8,143
HASTINGS EAST....	....	7.80	....	19.00	142.50	195	0.01	15	103.81	1,946	0.15	20	....	....	6.01	186	43	....	....	4	....	....	....	3	....	....	....	....	....	....	....	15	100
HASTINGS WEST....	0.05	3.40	0.20	0.42	238.58	210	1.25	125	105.70	537	0.35	13	....	....	3.50	46	37	1	....	3	....	....	....	2	....	....	4	....	....	....	....	733	745
MUSKOKA.........	7.06	160.91	7.23	5.98	953.36	10,602	7.85	....	345.17	....	13.18	....	745	....	21.50	3,582	304	34	41	23	....	....	....	1	....	....	9	....	....	....	....	14,396	3,875
PARRY SOUND.....	0.73	104.83	3.08	20.30	134.16	10,959	12.16	....	177.16	1,361	119.91	1,680	....	....	....	4,033	456	....	8	10	1	....	....	....	....	....	23	....	....	....	....	9,003	1,607
PETERBOROUGH....	....	....	0.13	0.13	37.13	50	....	....	11.06	....	0.01	....	....	....	4.27	358	5	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	5
SIMCOE EAST......	....	1.00	....	....	1.50	1,200	....	....	31.50	....	....	....	....	....	5.00	2,900	1	....	12	17	....	....	....	....	....	....	....	....	....	....	....	4,550	....
SIMCOE CENTRE....	....	2.00	....	....	25.25	518	0.50	....	25.75	....	0.50	....	....	....	....	940	1	....	....	8	....	....	....	....	....	....	....	....	....	....	....	968	....
TOTALS......	9.01	315.40	12.80	50.62	2304.84	33,486	57.53	710	1520.12	5,876	159.83	4,125	34,983	25,695	92.17	17,498	1,063	100	76	104	1	....	....	9	....	....	49	....	....	....	....	60,682	17,876

Elec		Bridges											Excavation	
		New			Replaced			Repaired			Painted		Earth	Rock
	Metal	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Cubic Yards	Cubic Yards
Addi	41	....	....	....	3	....	....	3	....	....	....	....	33,267	42,800
Alg	12	....	....	....	....	....	....	....	....	....	....	....	37,474	18,452
Coci	16	....	....	....	....	....	....	....	....	....	....	....	7,920	....
Coci	35	5	....	....	....	....	....	....	....	....	....	....	5,070	7,928
For	1	....	....	....	....	....	....	....	....	....	....	....	23,908	....
Hal	49	....	....	....	1	....	....	4	....	....	....	....	77,844	27,583
Has	37	....	....	....	5	....	....	2	....	....	....	....	29,434	38,072
Has	5	....	....	....	2	....	....	4	....	....	....	....	2,452	5,058
Ken	11	2	....	....	....	....	....	....	....	....	....	....	65,075	18,457
Lan	...	....	....	....	....	....	....	....	....	....	....	....	11,396	505
Ma	2	....	....	....	....	....	....	....	....	....	....	....	6,918	3,062
Mu	56	....	....	....	....	....	....	....	....	....	....	....	98,066	11,909
Nipi	...	....	....	....	....	....	....	....	....	....	....	....	86,978	48,165
Par	80	....	....	....	....	....	....	....	....	....	....	....	175,100	58,830
Peti	43	....	....	....	....	....	....	5	....	1	....	....	23,042	33,822
Por	3	....	....	....	....	....	....	....	....	....	....	....	9,316	689
Rai	2	1	....	....	....	....	....	....	....	....	....	....	8,894	3,233
Ren	24	....	....	....	....	....	....	....	4	....	....	....	24,911	7,944
Ren	28	....	....	....	....	....	....	....	1	....	....	....	35,432	7,365
Sau	5	....	....	....	....	....	....	....	....	....	....	....	12,860	13,100
Stu	84	....	....	....	9	....	....	28	1	....	1	....	162,716	121,054
Sud	21	....	....	....	....	....	....	....	....	....	....	....	31,110	10,801
Tem	27	....	....	....	....	....	....	3	....	....	....	....	22,271	3,365
	582	8	....	....	20	....	....	49	6	1	1	....	991,454	482,194

APPENDIX C

DEPARTMENT OF NORTHERN DEVELOPMENT-REPORT, Apr. 1, 1935-Mar. 31, 1936

UNEMPLOYMENT RELIEF WORK

Electoral District	Cutting and Burning New Road	Side Brushing Existing Road	Stump and Grub	Grading		Ditching	Gravelling				Clay Surfacing		Crushed Rock			Drag-ging, Miles	Culverts				Bridges											Excavation	
							New		Repairs												New			Replaced			Repaired			Painted			
	Miles	Miles	Miles	New Miles	Repairs Miles	Cu. Yds.	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Crushed Cubic Yards	Hauled Cubic Yards	Road Covered Miles		Wood	Stone	Concrete	Metal	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Earth Cubic Yards	Rock Cubic Yards
ADDINGTON	1.57	1.21	1.38	3.16	675.06	4,893	9.86	7,796	227.71	9,325	23.55	11,467			.10	819	92	12	12	41				3			3					33,267	42,800
ALGOMA	.80	1.07	1.37	19.95	1.06	17,308	15.83	5,941	1.46	834	1.33	715					9			12												37,474	18,452
COCHRANE NORTH	5.44	29.55	3.15			44,531	10.54	8,193		1,750							23			16												7,920	
COCHRANE SOUTH	18.55	7.75	7.22	2.17	3.88	34,394		4,322		3,446		2,220		9,332		1,165	34			35	5											5,070	7,928
FORT WILLIAM	1.25			0.05		490	0.25	636	1.00	390						25	2			1												23,908	
HALIBURTON VICTORIA	10.15	14.66	3.93	16.45	62.94	2,335	12.61	7,407	38.40	5,863	13.59	3,321	33,365	27,203	49.98	8,050	15	32		49				1			4					77,844	27,583
HASTINGS EAST	0.85	9.55	12.62	19.30	147.87	8,377	6.03	1,714	128.32	3,372	24.54	5,761			6.01	626	47	9		37				5			2					29,434	38,072
HASTINGS WEST	1.02	4.02	1.12	70.93	327.96	1,130	4.56	1,625	83.01	1,650	8.60	1,475	200	687	6.25	343	39	3		5				2			4					2,452	5,058
KENORA	24.15	9.30	7.07	7.90	38.45	23,799	13.88	20,657	23.95	16,654	4.43	4,317				4,101	15			11	2											65,075	18,457
LANARK				0.55	3.40	87	0.72	850	1.55	955	0.10	228				50	4	2														11,396	505
MANITOULIN	1.07	0.38	3.54	6.33		1,075	33.98	4,498	1.97	274	1.26	1,463		721	2.06	629	7			2												6,918	3,062
MUSKOKA	4.10		3.55	5.83		10,662	15.07	20,314	6.00	622	2.12	310				147	13	18	1	56												98,066	11,909
NIPISSING	1.91	13.00	2.03	1.45	8.50	2,090	20.56	280,40			8.80	32,506				145	31	5														86,978	48,165
PARRY SOUND	17.86	1.68	24.05	16.65	200.00	27,200	36.55	255,08	9.37	1,499	9.25	14,070				1,769	93	19		80												175,100	58,830
PETERBOROUGH	2.00	17.75	8.33	1.45	119.40	2,641	4.40	7,957	7.10	1,899	11.12	16,678		2,214	7.00	4,055		1		43							5		1			23,042	33,822
PORT ARTHUR	0.85	3.45	0.25	4.01	3.00	942	5.38	4,033	3.33	1,323						148	4			3												9,316	689
RAINY RIVER	3.86	23.19	.40	1.95		2,936	1.95	4,568	0.17	270	0.91	1,814				90	1			2	1											8,894	3,233
RENFREW NORTH	1.77	90.93	2.08	5.33	74.24	159	12.18	5,045	95.22	3,340	0.84	756				1,080	19	8		24								4				24,911	7,944
RENFREW SOUTH	2.32	22.59	2.66	3.25	81.39	3,054	11.58	8,833	68.28	10,277	4.51	4,306				599	22	18		28								1				35,432	7,365
SAULT STE. MARIE	2.51	26.50	2.96	10.00		2,615	5.10	3,512	15.90	2,728	2.40	447				4,839	12			5												12,860	13,100
STURGEON FALLS	18.82	38.39	18.70	30.33	78.15	31,694	28.76	54,765	103.16	24,060	12.85	35,332	2,224	2,667	0.38	13,663	125	16		84				9			28	1		1		162,716	121,054
SUDBURY	5.24	5.95	7.82	10.71	56.05	4,746	1.97	2,206	56.60	16,513	14.33	2,470		6,109	11.22	3,628	37		1	21												31,110	10,801
TEMISKAMING	9.20	16.46	5.79	1.61	13.72	48,074	19.49	13,491	25.15	6,031	14.21	5,627		670	0.55	52	35	3		27							3					22,271	3,365
TOTALS	135.29	337.38	120.02	239.36	1895.07	275,232	271.25	241,911	897.65	113,075	158.74	145,283	35,789	49,603	83.55	46,023	679	146	14	582	8			20			49	6	1	1		991,454	482,194

Elec		Bridges											Excavation	
		New			Replaced			Repaired			Painted		Earth	Rock
	Metal	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Cubic Yards	Cubic Yards
For	71	....	....	1	4	....	....	1	....	....	....	....	356,535	36,993
Ken	52	8	....	....	....	....	....	....	....	....	....	....	207,117	110,081
Nipi	6	2	....	....	....	....	....	1	....	....	....	....	16,841	11,273
Por	175	....	....	....	....	....	....	2	....	1	2	....	1,453,340	633,669
Ren	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	304	10	....	1	4	....	....	4	....	1	2	....	2,033,833	792,016

APPENDIX D

DEPARTMENT OF NORTHERN DEVELOPMENT-REPORT, Apr. 1, 1935-Mar. 31, 1936

TRANS-CANADA HIGHWAY

Electoral District	Cutting and Burning New Road Miles	Side Brushing Existing Road Miles	Stump and Grub Miles	Grading		Ditching	Gravelling				Clay Surfacing		Crushed Rock			Drag-ging, Miles	Culverts				Bridges											Excavation	
							New		Repairs												New			Replaced			Repaired			Painted			
				New Miles	Repair Miles	Cu. Yds.	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Length Miles	Cubic Yards	Crushed Cubic Yards	Hauled Cubic Yards	Road Covered Miles		Wood	Stone	Concrete	Metal	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Earth Cubic Yards	Rock Cubic Yards
FORT WILLIAM	7.20	31.25	4.15	6.00	1.24	57,665	7.54	157,336	40.89	9,598	15.03	25,911	....	....	....	1,398	3	....	....	71	....	....	1	4	....	....	1	....	....	....	....	356,535	36,993
KENORA	40.67	48.29	39.01	24.63	112.80	25,383	18.57	32,675	9.92	82,727	22.92	32,988	....	30	....	27,946	17	2	14	52	8	....	....	....	....	....	....	....	....	....	....	207,117	110,081
NIPISSING	5.53	87.00	0.43	0.53	5.17	3,257	3.10	1,572	146.68	41,858	68.48	8,688	....	70	5.00	....	9	2	....	6	2	....	....	....	....	....	1	....	....	....	....	16,841	11,273
PORT ARTHUR	110.01	14.67	112.24	1.94	128.29	2,012	1.87	6,524	119.68	14,145	21.25	1,436	....	270	....	789	21	9	....	175	....	....	....	....	....	....	2	....	1	2	....	1,453,340	633,669
RENFREW NORTH	....	....	....	....	....	....	....	....	....	....	....	....	....	775	7.50	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
TOTALS	163.41	181.21	155.83	33.10	247.50	88,317	31.08	198,107	317.17	148,328	127.68	69,023	....	1,145	12.50	30,133	50	13	14	304	10	....	1	4	....	....	4	....	1	2	....	2,033,833	792,016

Ele		Bridges											Excavation	
		New			Replaced			Repaired			Painted		Earth	Rock
	Metal	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Cubic Yards	Cubic Yards
Add	...	....	....	....	....	....	....	....	....	....	....	....	559	1,529
Hal	1	....	....	....	....	....	....	....	....	....	....	....	2,503	420
Has	...	....	....	....	....	....	....	....	....	....	....	....	2,041	206
Has	...	....	....	....	....	....	....	....	....	....	....	....	2,077	729
Lan	...	....	....	....	....	....	....	....	....	....	....	....	1,150	30
Mus	...	....	....	....	....	....	....	....	....	....	....	....	5,766	382
Par	1	....	....	....	....	....	....	6	....	....	....	....	20,292	741
Pet	2	....	....	....	....	....	....	1	....	....	....	....	982	219
Ren	...	....	....	....	....	....	....	3	....	....	....	....	3,571	295
Ren	2	....	....	....	....	....	....	....	....	....	....	....	1,550	275
Simc	...	....	....	....	....	....	....	....	....	....	....	....	6,245	77
Simc	...	....	....	....	....	....	....	....	....	....	....	....	250	....
Vict	...	....	....	....	....	....	....	....	....	....	....	....	....	....
	6	....	....	....	....	....	....	10	....	....	....	....	46,986	4,903

APPENDIX E

DEPARTMENT OF NORTHERN DEVELOPMENT-REPORT, Apr. 1, 1935-Mar. 31, 1936

Direct Grants – Colonization Roads

Electoral District	Cutting and Burning New Road Miles	Side Brushing Existing Road Miles	Stump and Grub Miles	Grading		Ditching Cu. Yds.	Gravelling				Clay Surfacing		Crushed Rock			Drag-ging, Miles	Culverts				Bridges											Excavation	
				New Miles	Repair Miles		New		Repairs		Length Miles	Cubic Yards	Crushed Cubic Yards	Hauled Cubic Yards	Road Covered Miles		Wood	Stone	Concrete	Metal	New			Replaced			Repaired			Painted		Earth Cubic Yards	Rock Cubic Yards
							Length Miles	Cubic Yards	Length Miles	Cubic Yards											Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel		
ADDINGTON	0.15	0.50	....	0.42	7.16	1,531	2.00	760	33.45	8,205	10.70	1,151	....	....	....	15	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	559	1,529
HALIBURTON	0.39	....	0.48	0.10	8.54	2,278	2.95	2,486	14.22	2,794	....	....	....	....	....	11	5	1	....	1	....	....	....	....	....	....	....	....	....	....	....	2,503	420
HASTINGS E.	....	0.75	....	0.20	5.37	584	1.25	405	4.75	992	0.82	673	....	....	....	....	3	2	....	....	....	....	....	....	....	....	....	....	....	....	....	2,041	206
HASTINGS W.	0.82	0.62	0.71	0.45	68.38	780	2.31	1,075	4.25	711	0.25	25	....	212	0.75	10	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	2,077	729
LANARK	....	0.50	....	....	10.00	525	....	....	2.00	1,238	0.50	300	....	....	....	4	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,150	30
MUSKOKA	0.33	2.63	1.59	0.50	1.54	1,686	0.64	352	4.91	1,623	0.50	305	....	....	....	18	16	4	....	....	....	....	....	....	....	....	....	....	....	....	....	5,766	382
PARRY SOUND	0.91	16.56	7.33	10.07	44.18	5,309	2.90	2,245	25.48	45,78	0.21	1,868	....	....	....	38	117	....	....	1	....	....	....	....	....	....	6	....	....	....	....	20,292	741
PETERBOROUGH	....	14.75	....	13.00	40.25	670	1.75	400	41.91	4,485	2.20	520	1,412	1,412	3.45	91	14	2	....	2	....	....	....	....	....	....	1	....	....	....	....	982	219
RENFREW N.	0.38	9.38	2.50	1.50	20.29	775	2.30	1,131	17.67	4,720	0.65	110	....	....	....	47	13	1	....	....	....	....	....	....	....	....	3	....	....	....	....	3,571	295
RENFREW S.	0.25	7.34	0.94	0.35	22.62	3,200	5.30	909	45.70	3,161	....	....	....	....	....	51	5	5	1	2	....	....	....	....	....	....	....	....	....	....	....	1,550	275
SIMCOE E.	0.30	3.25	2.25	1.30	5.99	5,145	1.94	827	12.12	1,635	0.33	108	....	695	3.46	881	26	....	2	....	....	....	....	....	....	....	....	....	....	....	....	6,245	77
SIMCOE CENTRE	....	....	....	....	3.83	....	....	....	2.16	988	0.33	58	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	250	....
VICTORIA	....	0.25	0.14	0.44	20.02	1,715	....	60	4·79	1,035	....	....	873	873	1.43	24	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
TOTALS	3.53	56.53	15.94	28.33	258.17	24,198	23.34	10,650	213.41	36,165	16.49	5,118	2,285	3,192	9.09	1,190	223	17	3	6	....	....	....	....	....	....	10	....	....	....	....	46,986	4,903

APPENDIX E

DEPARTMENT OF NORTHERN DEVELOPMENT-REPORT, Apr. 1, 1935-Mar. 31, 1936

Direct Grants – Colonization Roads

Electoral District	Cutting and Burning New Road Miles	Side Brushing Existing Road Miles	Stump and Grub Miles	Grading		Ditching	Gravelling				Clay Surfacing		Crushed Rock			Drag-ging, Miles	Culverts				Bridges											Excavation	
				New Miles	Repair Miles	Cu. Yds.	New		Repairs		Length Miles	Cubic Yards	Crushed Cubic Yards	Hauled Cubic Yards	Road Covered Miles		Wood	Stone	Concrete	Metal	New			Replaced			Repaired			Painted		Earth	Rock
							Length Miles	Cubic Yards	Length Miles	Cubic Yards											Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Concr.	Wood	Steel	Cubic Yards	Cubic Yards
Addington	0.15	0.50		0.42	7.16	1,531	2.00	760	33.45	8,205	10.70	1,151				15	8															559	1,529
Haliburton	0.39		0.48	0.10	8.54	2,278	2.95	2,486	14.22	2,794						11	5	1		1												2,503	420
Hastings E.		0.75		0.20	5.37	584	1.25	405	4.75	992	0.82	673					3	2														2,041	206
Hastings W.	0.82	0.62	0.71	0.45	68.38	780	2.31	1,075	4.25	711	0.25	25		212	0.75	10	2	2														2,077	729
Lanark		0.50			10.00	525			2.00	1,238	0.50	300				4	10															1,150	30
Muskoka	0.33	2.63	1.59	0.50	1.54	1,686	0.64	352	4.91	1,623	0.50	305				18	16	4														5,766	382
Parry Sound	0.91	16.56	7.33	10.07	44.18	5,309	2.90	2,245	25.48	45,78	0.21	1,868				38	117			1							6					20,292	741
Peterborough		14.75		13.00	40.25	670	1.75	400	41.91	4,485	2.20	520	1,412	1,412	3.45	91	14	2		2							1					982	219
Renfrew N.	0.38	9.38	2.50	1.50	20.29	775	2.30	1,131	17.67	4,720	0.65	110				47	13	1									3					3,571	295
Renfrew S.	0.25	7.34	0.94	0.35	22.62	3,200	5.30	909	45.70	3,161						51	5	5	1	2												1,550	275
Simcoe E.	0.30	3.25	2.25	1.30	5.99	5,145	1.94	827	12.12	1,635	0.33	108		695	3.46	881	26		2													6,245	77
Simcoe Centre					3.83				2.16	988	0.33	58																				250	
Victoria		0.25	0.14	0.44	20.02	1,715		60	4·79	1,035			873	873	1.43	24	4																
Totals	3.53	56.53	15.94	28.33	258.17	24,198	23.34	10,650	213.41	36,165	16.49	5,118	2,285	3,192	9.09	1,190	223	17	3	6							10					46,986	4,903

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